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LOGINID:SSSPTA1623PAZ

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	SEP 01	New pricing for the Save Answers for SciFinder Wizard within STN Express with Discover!
NEWS	4	OCT 28	KOREAPAT now available on STN
NEWS	5	NOV 30	PHAR reloaded with additional data
NEWS	6	DEC 01	LISA now available on STN
NEWS	7	DEC 09	12 databases to be removed from STN on December 31, 2004
NEWS	8	DEC 15	MEDLINE update schedule for December 2004
NEWS	9	DEC 17	ELCOM reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	10	DEC 17	COMPUAB reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	11	DEC 17	SOLIDSTATE reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	12	DEC 17	CERAB reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	13	DEC 17	THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB
NEWS	14	DEC 30	EPFULL: New patent full text database to be available on STN
NEWS	15	DEC 30	CAPLUS - PATENT COVERAGE EXPANDED
NEWS	16	JAN 03	No connect-hour charges in EPFULL during January and February 2005
NEWS	17	JAN 11	CA/CAPLUS - Expanded patent coverage to include Russia (Federal Institute of Industrial Property)

NEWS EXPRESS	JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 06:28:07 ON 14 JAN 2005

=> file reg
COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION
FULL ESTIMATED COST | 0.21 | 0.21

FILE 'REGISTRY' ENTERED AT 06:28:14 ON 14 JAN 2005
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Property values tagged with IC are from the ZIC/VINITI data file
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STRUCTURE FILE UPDATES: 12 JAN 2005 HIGHEST RN 812631-13-3
DICTIONARY FILE UPDATES: 12 JAN 2005 HIGHEST RN 812631-13-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

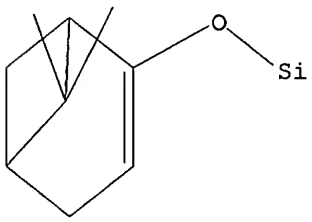
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=>
Uploading C:\Examination Auxillary files\10784930\10784930 silylether.str

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> search l1 sss sam
SAMPLE SEARCH INITIATED 06:28:45 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 368 TO ITERATE

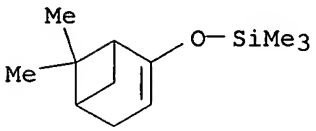
100.0% PROCESSED 368 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 6210 TO 8510
PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

=> d scan

L2 1 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Silane, [(6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl)oxy]trimethyl- (9CI)
MF C12 H22 O Si



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> search l1 sss full
FULL SEARCH INITIATED 06:29:15 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 7774 TO ITERATE

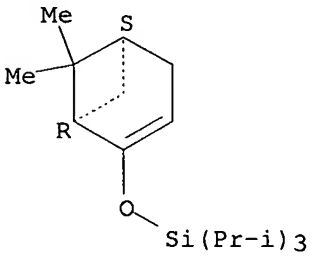
100.0% PROCESSED 7774 ITERATIONS 7 ANSWERS
SEARCH TIME: 00.00.01

L3 7 SEA SSS FUL L1

=> d scan

L3 7 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Silane, [[(1R,5S)-6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl]oxy]tris(1-methylethyl)- (9CI)
MF C18 H34 O Si

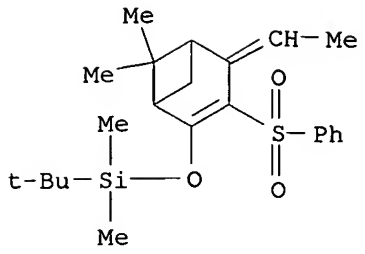
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

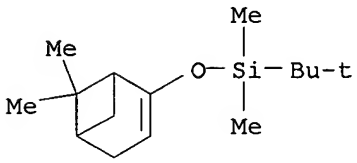
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):7

L3 7 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Silane, (1,1-dimethylethyl)[[4-ethylidene-6,6-dimethyl-3-(phenylsulfonyl)bicyclo[3.1.1]hept-2-en-2-yl]oxy]dimethyl-, [1R-(1α,4E,5α)]- (9CI)
MF C23 H34 O3 S Si



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

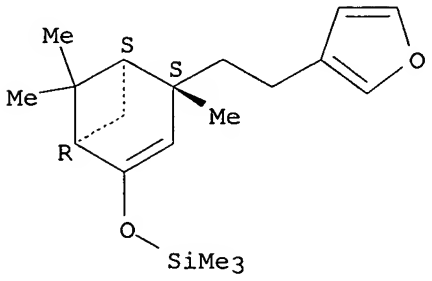
L3 7 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Silane, [(6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl)oxy](1,1-dimethylethyl)dimethyl- (9CI)
MF C15 H28 O Si



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 7 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Silane, [[(1R,4S,5S)-4-[2-(3-furanyl)ethyl]-4,6,6-trimethylbicyclo[3.1.1]hept-2-en-2-yl]oxy]trimethyl-, rel- (9CI)
MF C19 H30 O2 Si

Relative stereochemistry.

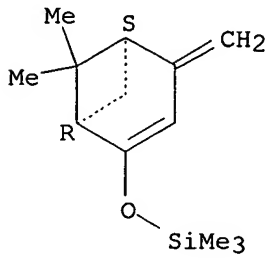


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 7 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Silane, [(6,6-dimethyl-4-methylenebicyclo[3.1.1]hept-2-en-2-yl)oxy]trimethyl-, (1R)- (9CI)

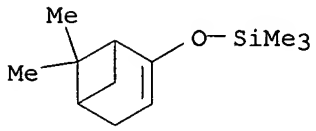
MF C13 H22 O Si

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

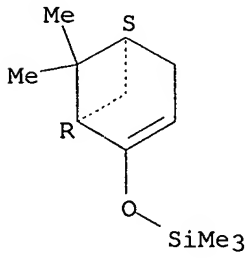
L3 7 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Silane, [(6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl)oxy]trimethyl- (9CI)
MF C12 H22 O Si



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 7 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Silane, [[(1R,5S)-6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl]oxy]trimethyl-
(9CI)
MF C12 H22 O Si

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> file caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION

FULL ESTIMATED COST 161.76 161.97

FILE 'CAPLUS' ENTERED AT 06:29:34 ON 14 JAN 2005
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 14 Jan 2005 VOL 142 ISS 3
FILE LAST UPDATED: 12 Jan 2005 (20050112/ED)

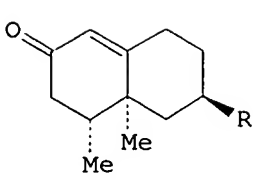
This file contains CAS Registry Numbers for easy and accurate substance identification.

=> l3
L4 12 L3

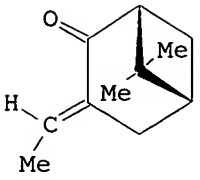
=> l3/prep
12 L3
3246478 PREP/RL
L5 11 L3/PREP
(L3 (L) PREP/RL)

=> d l5 9-11 ti fbib abs

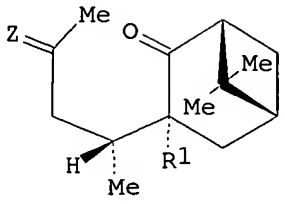
L5 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN
TI Highly efficient synthesis of (+)-nootkatone from (-)-β-pinene
AN 1981:15894 CAPLUS
DN 94:15894
TI Highly efficient synthesis of (+)-nootkatone from (-)-β-pinene
AU Miyashita, Masaaki; Yanami, Tetsuji; Yoshikoshi, Akira
CS Chem. Res. Inst. Non-Aqueous Solutions, Tohoku Univ., Sendai, Japan
SO Tennen Yuki Kagobutsu Toronkai Koen Yoshishu, 22nd (1979), 190-7
Publisher: Kyushu Daigaku Rigakubu Kagakka, Fukuoka, Japan.
CODEN: 43IQAR
DT Conference
LA Japanese
GI



I



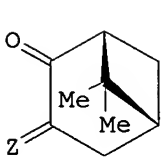
II



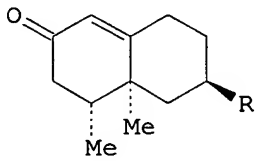
III

AB (+)-Nootkatone (I, R = CMe:CH2) was stereoselectively prepared in 5 steps from (+)-nopinone via the addition reaction of II with CH2:CMeCH2SiMe3, methylation of III (R1 = H, Z = CH2), ozonolysis of III (R1 = Me, Z = CH2), reaction of III (R1 = Me, Z = O) with HCl, and dehydrochlorination of I (R = CMe2Cl).

L5 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN
TI Highly efficient synthesis of (+)-nootkatone from (-)-β-pinene
AN 1980:198554 CAPLUS
DN 92:198554
TI Highly efficient synthesis of (+)-nootkatone from (-)-β-pinene
AU Miyashita, Masaaki; Yanami, Tetsuji; Yoshikoshi, Akira
CS Chem. Res. Inst. Non-Aqueous Solutions, Tohoku Univ., Sendai, Japan
SO Koen Yoshishu - Tennen Yuki Kagobutsu Toronkai, 22nd (1979), 190-7
Publisher: Kyushu Univ., Fac. Sci., Dep. Chem., Fukuoka, Japan.
CODEN: 42MAAQ
DT Conference
LA Japanese
GI



I

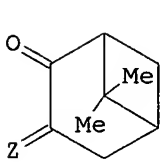


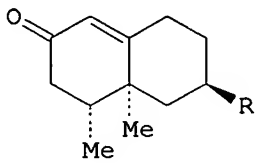
II

AB trans-3-Ethylidenenopinone [I, Z = (E)-MeCH], obtained by condensation of I (Z = H2) with MeCHO, was treated with CH2:CHCH2SiMe3 in the presence of TiCl4 to give the methylbutenyl derivative I (Z = α-H, β-CH2:CHCH2CHMe), which was methylated with MeI in the presence of NaNH2 to give I (Z = α-Me, β-CH2: CHCH2CHMe), whose oxidation with Hg(OAc)2 gave I (Z = α-Me, β-MeCOCH2CHMe). Cyclization of the diketone in AcOH-HCl gave the (chloroisopropyl)naphthalenone II (R = CMe2Cl), which was dehydrochlorinated to give nootkatone (II, R = CMe:CH2) in 72% yield.

L5 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN
TI Synthetic study of (+)-nootkatone from (-)-β-pinene
AN 1980:129117 CAPLUS
DN 92:129117
TI Synthetic study of (+)-nootkatone from (-)-β-pinene

AU Yanami, Tetsuji; Miyashita, Masaaki; Yoshikoshi, Akira
CS Chem. Res. Inst. Non-Aqueous Solutions, Tohoku Univ., Sendai, 980, Japan
SO Journal of Organic Chemistry (1980), 45(4), 607-12
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
GI



I


II

AB Condensing (+)-nopinone with MeCHO followed by acid treatment gave ethylidenenopinone I (Z = MeCH) whose treatment with CH2:CMeCH2SiMe3 gave I (Z = α-H,β-CH2:CMeCH2CHMe). The last was methylated with MeI-NaNH2 to give I (Z = α-Me,β-CH2:CMeCH2CHMe) whose ozonolysis gave I [Z = α-Me,β-(R)-MeCOCH2CHMe], reaction of which with HCl gave naphthalenone II (R = CMe2Cl), whose dehydrochlorination over Al2O3 gave (±)-nootkatone II (R = CMe:CH2).

=> save temp l4 silyl;ethers/a
SILYL IS NOT A VALID SAVED NAME
Enter the name you wish to use for the saved query,
answer set, or L-number list. The name must:
1. Begin with a letter,
2. Have 1-12 characters,
3. Contain only letters (A-Z) and numbers (0-9),
4. End with /Q for a query (search profile, structure, or screen set), /A for an answer set, or /L for an L-number list.
5. Not already be in use as a saved name,
6. Not be END, SAV, SAVE, SAVED
7. Not have the form of an L-number (Lnnn).
ENTER NAME OR (END):silylethrs/a
ANSWER SET L4 HAS BEEN SAVED AS 'SILYLETHRS/A'

SAVED ANSWER SET NAME MAY NOT BE USED IN QUERIES 'ETHERS/A'
Saved answer sets must be activated before they are used in search profiles. This must be done in the same file in which they were created. Use the FILE command to change files if necessary, then enter "ACTIVATE" followed by the saved name (including /A) at an arrow prompt (=>). Use the L# assigned to the answer set in your search profile.

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	19.29	181.26

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.19	-2.19

FILE 'REGISTRY' ENTERED AT 06:42:12 ON 14 JAN 2005
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STRUCTURE FILE UPDATES: 12 JAN 2005 HIGHEST RN 812631-13-3
DICTIONARY FILE UPDATES: 12 JAN 2005 HIGHEST RN 812631-13-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

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Experimental and calculated property data are now available. For more
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to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

```
=> e Silane, [(6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl)oxy]trimethyl-/cn
E1            1      SILANE Y/CN
E2            1      SILANE Z 6040/CN
E3            0 --> SILANE, (6,6-DIMETHYLBICYCLO3.1.1HEPT-2-EN-2-YL)OXYTRIME
                     THYL-/CN
E4            1      SILANE, (((((1R,2R)-2,3-DIHYDRO-1-(PHENYLSELENO)-1H-INDEN-2-
                     YL)OXY)DIMETHYLSILYL)ETHYNYL)TRIMETHYL-, REL-/CN
E5            1      SILANE, (((((1R,2R)-2,3-DIHYDRO-2-IODO-1H-INDEN-1-YL)OXY)DIM
                     ETHYLSILYL)ETHYNYL)TRIMETHYL-, REL-/CN
E6            1      SILANE, (((((1R,2R)-2-IODOCYCLOHEXYL)OXY)DIMETHYLSILYL)ETHYN
                     YL)TRIMETHYL-, REL-/CN
E7            1      SILANE, (((((1R,2R)-2-IODOCYCLOPENTYL)OXY)DIMETHYLSILYL)ETHY
                     NYL)TRIMETHYL-, REL-/CN
E8            1      SILANE, (((((2,4,6-TRICHLOROPHENOXY)ACETYL)OXY)STANNYLIDYNE)
                     TRIS(METHYLENE))TRIS(DIMETHYLPHENYL-/CN
E9            1      SILANE, (((((2,4,6-TRICHLOROPHENOXY)ACETYL)OXY)STANNYLIDYNE)
                     TRIS(METHYLENE))TRIS(METHYLDIPHENYL-/CN
E10           1      SILANE, (((((2,4-DICHLOROPHENOXY)ACETYL)OXY)STANNYLIDYNE)TRI
                     S(METHYLENE))TRIS(DIMETHYLPHENYL-/CN
E11           1      SILANE, (((((2,4-DICHLOROPHENOXY)ACETYL)OXY)STANNYLIDYNE)TRI
                     S(METHYLENE))TRIS(METHYLDIPHENYL-/CN
E12           1      SILANE, (((((2-CHLOROPHENOXY)ACETYL)OXY)STANNYLIDYNE)TRIS(ME
                     THYLENE))TRIS(DIMETHYLPHENYL-/CN

=> file reg
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.86     182.12

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                       0.00      -2.19

FILE 'REGISTRY' ENTERED AT 06:43:09 ON 14 JAN 2005
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:  12 JAN 2005  HIGHEST RN 812631-13-3
```

DICTIONARY FILE UPDATES: 12 JAN 2005 HIGHEST RN 812631-13-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> file caplu

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.43	182.55

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-2.19

FILE 'CAPLUS' ENTERED AT 06:43:14 ON 14 JAN 2005
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 14 Jan 2005 VOL 142 ISS 3
FILE LAST UPDATED: 12 Jan 2005 (20050112/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 06:28:07 ON 14 JAN 2005)

FILE 'REGISTRY' ENTERED AT 06:28:14 ON 14 JAN 2005
L1 STRUCTURE UPLOADED
L2 1 SEARCH L1 SSS SAM
L3 7 SEARCH L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 06:29:34 ON 14 JAN 2005
L4 12 L3
L5 11 L3/PREP
SAVE TEMP L4 SILYL SILYLETHRS/A

FILE 'REGISTRY' ENTERED AT 06:42:12 ON 14 JAN 2005
E SILANE, [(6,6-DIMETHYLBICYCLO[3.1.1]HEPT-2-EN-2-YL)OXY]TRIMET

FILE 'REGISTRY' ENTERED AT 06:43:09 ON 14 JAN 2005

FILE 'CAPLUS' ENTERED AT 06:43:14 ON 14 JAN 2005

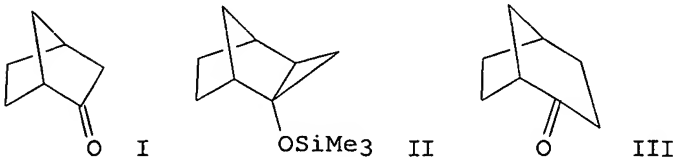
=> d l5 5-8 ti fbib abs

L5 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN
TI Extracyclic stereocontrolled alkylation of (1R,5S)-4-ethyl-6,6-dimethyl-3-(phenylsulfonyl)bicyclo[3.1.1]hept-3-en-2-one. A highly stereocontrolled synthesis of (-)-kanshone A
AN 1993:650190 CAPLUS
DN 119:250190
TI Extracyclic stereocontrolled alkylation of (1R,5S)-4-ethyl-6,6-dimethyl-3-(phenylsulfonyl)bicyclo[3.1.1]hept-3-en-2-one. A highly stereocontrolled synthesis of (-)-kanshone A
AU Kato, Michiharu; Watanabe, Masataka; Awen, Bahlul Z.
CS Inst. Chem. React. Sci., tohoku Univ., Sendai, 980, Japan
SO Journal of Organic Chemistry (1993), 58(19), 5145-52
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
OS CASREACT 119:250190
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB (1R,5S)-4-Ethyl-6,6-dimethyl-3-(phenylsulfonyl)bicyclo[3.1.1]hept-3-en-2-one (I; R1 = SO2Ph, R2 = Et) was prepared from (+)-nopinone in six steps and 70% overall yield via (1R,5R)-6,6-dimethyl-3-(phenylthio)bicyclo[3.1.1]hept-3-en-2-one (I; R1 = SPh, R2 = H). Alkylation reactions of I (R1 = SO2Ph, R2 = Et) with alkyl bromides (allyl, 3-methyl-2-butenyl, propargyl, benzyl) in the presence of K2CO3 in MeCN proceeded in regio- and extracyclic stereocontrolled fashion to give, as the major product, mixts. of γ-alkylated products II (R1 = SO2Ph, R3 = CH2CH:CH2, CH2CH:CMe3, CH2C.tplbond.CH, PhCH2, CH2CO2Me) possessing a new chiral center of R configuration adjacent to a ring and III (R3 = CH2CH:CH2, CH2CH:CMe2, CH2C.tplbond.CH, PhCH2) possessing that of S configuration, whose ratios are II-III 10:1, 7:1, 13:1 and 18:1, resp., along with α-alkylated products IV (R4 = CH2CH:CH2, CH2CH:CMe2, CH2C.tplbond.CH, PhCH2) and O-alkylated products V (R5 = CH2CH:CH2, CH2CH:CMe2) on reactions with allyl and dimethylallyl bromides. In addition, reaction of I (R1 = SO2Ph, R2 = Et) with Me bromoacetate provided II (R1 = SO2Ph, R3 = CH2CO2Me) as the sole product. In the presence of a combined reagent, K2CO3-Cs2CO3 (9:1), in MeCN, considerable high diastereoselection was detected, i.e., reactions of I (R1 = SO2Ph, R2 = Et) with allyl and dimethylallyl bromides produced mixts. of II and III 20:1 and 12:1 ratios, resp. Reaction products were separated by chromatog. on silica gel, while the major diastereomers II (R1 = SO2Ph, R3 = CH2CH:CH2, CH2C.tplbond.CH, PhCH2, CH2CO2Me) highly crystalline themselves, were readily obtained as pure crystals by recrystn. Mechanism of diastereoselection and the scope and limitations of the extracyclic stereocontrolled alkylation are briefly discussed. In the application of II as the synthetic intermediate for the asym. synthesis, starting with (1R,5S)-6,6-dimethyl-4-[(1R)-1-methyl-3-butenyl]-3-(phenylsulfonyl)bicyclo[3.1.1]hept-3-en-2-one (II; R1 = SO2Ph, R3 = CH2CH:CH2), (-)-kanshone A (VI), a nardosinane sesquiterpene, was synthesized in a highly stereoselective fashion in 12 steps via (1R,4R,5R)-4,6,6-trimethyl-4-[(1R)-1-methyl-3-butenyl]bicyclo[3.1.1]heptan-2-one (II; R1 = H, R3 = CH2CH:CH2) and its cyclobutane-ring opening product, (4S,4aR,5R)-1-acetoxy-4-isopropenyl-4a,5-dimethyl-3,4,4a,5,6,7-hexahydronaphthalene.

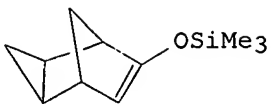
L5 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN
TI Carbon-13 magnetic resonance studies. 124. Preparative ring expansions of bicyclic ketones by homoketonization of cyclopropoxide analogs
AN 1987:101776 CAPLUS
DN 106:101776
TI Carbon-13 magnetic resonance studies. 124. Preparative ring expansions of bicyclic ketones by homoketonization of cyclopropoxide analogs
AU Patel, Vijay; Ragauskas, Arthur J.; Stothers, J. B.
CS Dep. Chem., Univ. West. Ontario, London, ON, N6A 5B7, Can.
SO Canadian Journal of Chemistry (1986), 64(7), 1440-9
CODEN: CJCHAG; ISSN: 0008-4042
DT Journal
LA English
OS CASREACT 106:101776
GI



I II III

AB Homoketonization of some readily prepared cyclopropoxides provides a new synthetic method for ring expansion of the [2.2.1] and [2.2.2] ring systems. Cyclopropanation of the trimethylsilyl enol ethers derived from a variety of polycyclic ketones affords the required cyclopropyl silyl ethers, which may be ketonized directly or hydrolyzed to the corresponding cyclopropanols before ketonization. The results for fourteen examples serve to define the scope of the ring expansion process, and the silyl enol ethers, cyclopropyl silyl ethers, and most of the corresponding cyclopropanols have been characterized by 13C NMR. The stereochem. of the ketonization leading to ring expansion was established by deuterium-labeling expts. Thus, bicyclic ketone I was converted to the trimethylsilyl enol ether, which underwent cyclopropanation with CH2I2 in presence of a Zn-Ag couple and the resulting cyclopropyl derivative II was treated with NaOH/MeOH to give ring expansion product III.

L5 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN
TI Carbon-13 magnetic resonance studies. 120. The Simmons-Smith reaction with some silyl enol ethers. Unusual ring expansions of some norcamphors
AN 1986:69020 CAPLUS
DN 104:69020
TI Carbon-13 magnetic resonance studies. 120. The Simmons-Smith reaction with some silyl enol ethers. Unusual ring expansions of some norcamphors
AU Ragauskas, Arthur J.; Stothers, J. B.
CS Dep. Chem., Univ. West. Ontario, London, ON, N6A 5B7, Can.
SO Canadian Journal of Chemistry (1985), 63(11), 2969-74
CODEN: CJCHAG; ISSN: 0008-4042
DT Journal
LA English
OS CASREACT 104:69020
GI



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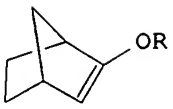
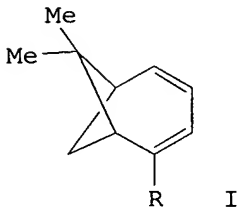


II

AB Simmons-Smith cyclopropanation of silyl enol ethers, e.g. I, II (R = Me3Si, Me3CSiMe2), of polycyclic ketones was studied. Product compns. depended on concns. of reactants, and tert-butyldimethylsilyl derivs. gave ring-expanded allylic ethers more efficiently than did the corresponding trimethylsilyl derivs.

L5 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN
TI Electronic absorption and circular dichroism spectra of the perturbed coplanar cis-diene chromophore in deuterium- and methyl-substituted 7,7-dimethylbicyclo[4.1.1]octa-2,4-dienes
AN 1983:521719 CAPLUS
DN 99:121719
TI Electronic absorption and circular dichroism spectra of the perturbed coplanar cis-diene chromophore in deuterium- and methyl-substituted 7,7-dimethylbicyclo[4.1.1]octa-2,4-dienes
AU Browne, Alan R.; Kearney, Francis R.; Mason, Stephen F.; Paquette, Leo A.; Drake, Alex F.
CS Dep. Chem., Ohio State Univ., Columbus, OH, 43210, USA
SO Journal of the American Chemical Society (1983), 105(19), 6123-9
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA English
GI



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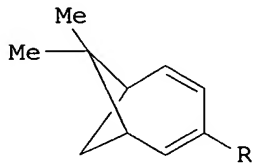


II

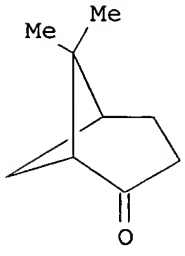
AB Optically active title compds. I (R = D) and II (R = D) were prepared with known absolute configuration from (+)-nopinone (III); also, I (R = Me) and II (R = Me) were prepared from (+)-α-pinene and III, resp. In I (R = D) and II (R = D) the chirality is due solely to isotopic substitution. The contributions of the C-D and C-Me groups to the observed absorption and CD spectra are analyzed. In particular, attention is directed to the planar cis-1,3-diene unit in I and II, the resultant zero dihedral angle between the C2-C3 and C4-C5 bonds at equilibrium, and the consequences of this unique fixed geometry.

=> d l5 1-4 ti fbib abs

L5 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN
TI Electrooxidative Coupling of Furans and Silyl Enol Ethers: Application to the Synthesis of Annulated Furans
AN 2004:344244 CAPLUS
DN 141:88977
TI Electrooxidative Coupling of Furans and Silyl Enol Ethers: Application to the Synthesis of Annulated Furans

AU Sperry, Jeffrey B.; Whitehead, Christopher R.; Ghiviriga, Ion; Walczak, Ryan M.; Wright, Dennis L.
CS Department of Chemistry, Dartmouth College, Hanover, NH, 03755, USA
SO Journal of Organic Chemistry (2004), 69(11), 3726-3734
CODEN: JOCEAH; ISSN: 0022-3263
PB American Chemical Society
DT Journal
LA English
OS CASREACT 141:88977
AB The preparation of annulated furan systems as key synthetic intermediates through the application of a two-step annulation involving an electrochem. ring closure between a furan and a silyl enol ether has been studied. The reaction was shown to be quite general for the formation of six-membered rings in good yields and was tolerant of a variety of different functional groups. The ring closure was highly stereoselective, leading to the formation of cis-fused systems. Cyclic voltammetry and probe mols. were used to gain mechanistic insight into the reaction. These studies suggested that the key ring closure involved an initial oxidation of the silyl enol ether to a radical cation followed by a furan-terminated cyclization.
RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN
TI A general method for the highly diastereoselective, kinetically controlled alkylation of (+)-nopinone
AN 2002:675080 CAPLUS
DN 138:4699
TI A general method for the highly diastereoselective, kinetically controlled alkylation of (+)-nopinone
AU Campos, Kevin R.; Lee, Sandra; Journet, Michel; Kowal, Jason J.; Cai, Dongwei; Larsen, Robert D.; Reider, Paul J.
CS Department of Process Research, Merck Research Laboratories, Rahway, NJ, 07065, USA
SO Tetrahedron Letters (2002), 43(39), 6957-6959
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 138:4699
GI



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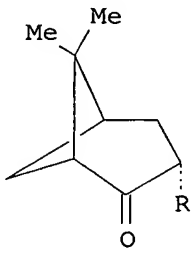

II

AB A general method for the monoalkylation of (+)-nopinone (I) was developed for a variety of carbon and heteroatom electrophiles to afford the kinetically controlled product II with high diastereoselectivity (98% d.e.) and excellent yield (75-90%).

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN
TI Process for producing bicyclic amino alcohol from (+)-nopinone
AN 2001:31442 CAPLUS
DN 134:101033
TI Process for producing bicyclic amino alcohol from (+)-nopinone
IN Honma, Tsunetoshi; Hiramatsu, Yoshiharu; Mitsumori, Susumu
PA Shionogi & Co., Ltd., Japan
SO PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI	WO 2001002334	A1	20010111	WO 2000-JP4171		20000626
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
				JP 1999-188674	A	19990702
	EP 1193243	A1	20020403	EP 2000-939160		20000626
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				WO 2000-JP4171	W	20000626
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				WO 2000-JP4171	W	20000626
	US 2004171882	A1	20040902	US 2004-784930		20040225
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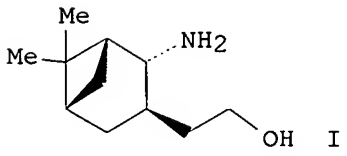
OS CASREACT 134:101033; MARPAT 134:101033
GI

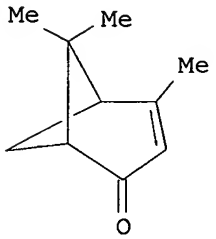


I

AB The bicyclic amino alc. I is prepared by reaction of (+)-nopinone with XCH2CO2R1 (X = halo; R1 = alkyl) in the presence of an additive and a base, followed by conversion of the product into an oxime, and reduction of the oxime. I is then converted in several steps to a known PGD2 antagonist.
RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

TI Oxidative Coupling of the Enolate Anion of (1R)-(+)-Verbenone with Fe(III) and Cu(II) Salts. Two Modes of Conjoining This Bicyclic Ketone across a Benzene Ring
AN 1995:865233 CAPLUS
DN 123:340464
TI Oxidative Coupling of the Enolate Anion of (1R)-(+)-Verbenone with Fe(III) and Cu(II) Salts. Two Modes of Conjoining This Bicyclic Ketone across a Benzene Ring
AU Paquette, Leo A.; Bzowej, Eugene I.; Branan, Bruce M.; Stanton, Kenetha J.
CS Evans Chemical Laboratories, Ohio State University, Columbus, OH, 43210, USA
SO Journal of Organic Chemistry (1995), 60(22), 7277-83
CODEN: JOCEAH; ISSN: 0022-3263
PB American Chemical Society
DT Journal
LA English
OS CASREACT 123:340464
GI



I

AB The regioselectivity of the oxidative coupling of the enolate anion of (1R)-(+)-verbenone (97% ee) (I) was examined with CuCl2 and FeCl3 as catalysts. With Cu(II), selective formation of the γ,γ-product is observed An increase in temperature above -40 °C results in further oxidation of the intra-ring ethano bridge to a trans double bond, provided that excess LDA has been added. In the presence of Fe(III), the coupling is partially diverted to the α,γ-product, which has proven amenable to direct conversion to that C2-sym. "dimer" having the carbonyl groups in a para relationship. The second C2 "dimer" featuring meta orientation of the ketone functionalities has been conveniently prepared from the trienedione or its derived diol by thermal or photochem. trans → cis equilibration, thermal 6π electrocyclization with concurrent aromatization, and PCC oxidation Some potential applications of this conformationally rigid benzenoid system to enantioselective synthesis are outlined.

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 NEWS  4  FEB 21  STN AnaVist, Version 1.1, lets you share your STN AnaVist
                  visualization results
 NEWS  5  FEB 22  The IPC thesaurus added to additional patent databases on STN
 NEWS  6  FEB 22  Updates in EPFULL; IPC 8 enhancements added
 NEWS  7  FEB 27  New STN AnaVist pricing effective March 1, 2006
 NEWS  8  MAR 03  Updates in PATDPA; addition of IPC 8 data without attributes
 NEWS  9  MAR 22  EMBASE is now updated on a daily basis
 NEWS 10  APR 03  New IPC 8 fields and IPC thesaurus added to PATDPAFULL
 NEWS 11  APR 03  Bibliographic data updates resume; new IPC 8 fields and IPC
                  thesaurus added in PCTFULL
 NEWS 12  APR 04  STN AnaVist $500 visualization usage credit offered
 NEWS 13  APR 12  LINSPEC, learning database for INSPEC, reloaded and enhanced
 NEWS 14  APR 12  Improved structure highlighting in FQHIT and QHIT display
                  in MARPAT
 NEWS 15  APR 12  Derwent World Patents Index to be reloaded and enhanced during
                  second quarter; strategies may be affected
 NEWS 16  MAY 10  CA/CAplus enhanced with 1900-1906 U.S. patent records
 NEWS 17  MAY 11  KOREAPAT updates resume
 NEWS 18  MAY 19  Derwent World Patents Index to be reloaded and enhanced
 NEWS 19  MAY 30  IPC 8 Rolled-up Core codes added to CA/CAplus and
                  USPATFULL/USPAT2
 NEWS 20  MAY 30  The F-Term thesaurus is now available in CA/CAplus
 NEWS 21  JUN 02  The first reclassification of IPC codes now complete in
                  INPADOC

 NEWS EXPRESS     FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
                  CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
                  AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
                  V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT
                  http://download.cas.org/express/v8.0-Discover/

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 NEWS LOGIN     Welcome Banner and News Items
 NEWS IPC8      For general information regarding STN implementation of IPC 8
 NEWS X25       X.25 communication option no longer available after June 2006

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specific topic.
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http://www.cas.org/ONLINE/UG/regprops.html

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PASSWORD:
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.44	0.65

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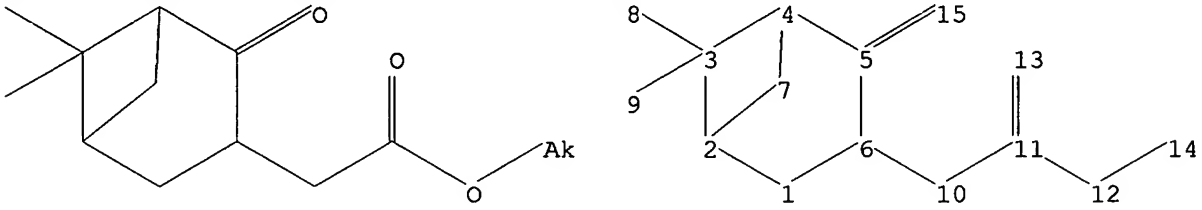

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exact/norm bonds :
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exact bonds :
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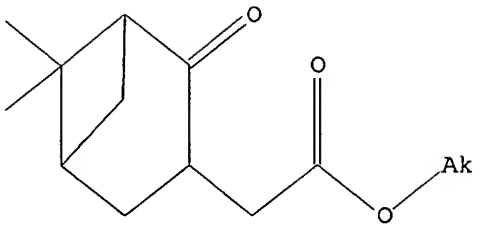

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100.0% PROCESSED      100 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:          1401 TO     2599
PROJECTED ANSWERS:                0 TO        0

L2            0 SEA SSS SAM L1

=> search l1 sss full
FULL SEARCH INITIATED 07:12:53 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -     2159 TO ITERATE

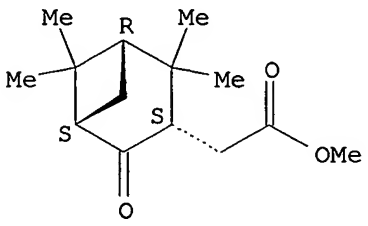
100.0% PROCESSED     2159 ITERATIONS                                5 ANSWERS
SEARCH TIME: 00.00.01

L3            5 SEA SSS FUL L1

=> d scan

L3   5 ANSWERS   REGISTRY  COPYRIGHT 2006 ACS on STN
IN   Bicyclo[3.1.1]heptane-3-acetic acid, 2,2,6,6-tetramethyl-4-oxo-, methyl
     ester, [1R-(1α,3β,5α)]- (9CI)
MF   C14 H22 O3

Absolute stereochemistry.
```

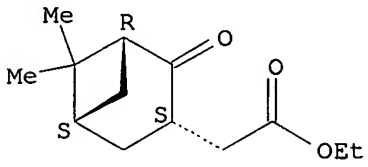


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):5

L3 5 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Bicyclo[3.1.1]heptane-3-acetic acid, 6,6-dimethyl-2-oxo-, ethyl ester, (1R,3S,5S)- (9CI)
MF C13 H20 O3

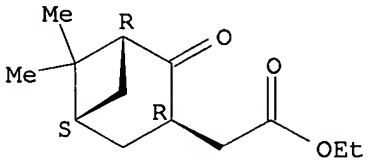
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 5 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Bicyclo[3.1.1]heptane-3-acetic acid, 6,6-dimethyl-2-oxo-, ethyl ester, (1R,3R,5S)- (9CI)
MF C13 H20 O3

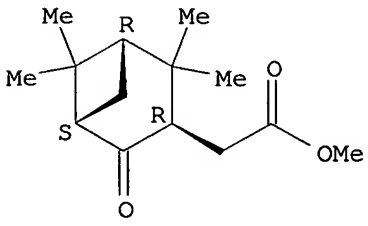
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

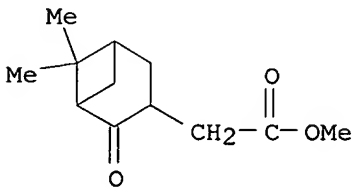
L3 5 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Bicyclo[3.1.1]heptane-3-acetic acid, 2,2,6,6-tetramethyl-4-oxo-, methyl ester, [1R-(1α,3α,5α)]- (9CI)
MF C14 H22 O3

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 5 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Bicyclo[3.1.1]heptane-3-acetic acid, 6,6-dimethyl-2-oxo-, methyl ester (9CI)
MF C12 H18 O3



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	167.38	167.59

FILE 'CAPLUS' ENTERED AT 07:13:17 ON 05 JUN 2006
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FILE COVERS 1907 - 5 Jun 2006 VOL 144 ISS 24
FILE LAST UPDATED: 4 Jun 2006 (20060604/ED)

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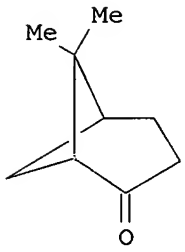
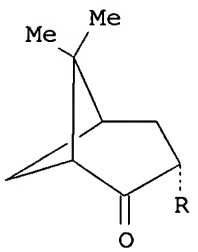
=> l3/prep
6 L3
3476900 PREP/RL
L4 6 L3/PREP
(L3 (L) PREP/RL)

=> d l4 1-6 ti fbib abs

L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
TI A general method for the highly diastereoselective, kinetically controlled alkylation of (+)-nopinone
AN 2002:675080 CAPLUS
DN 138:4699
TI A general method for the highly diastereoselective, kinetically controlled alkylation of (+)-nopinone
AU Campos, Kevin R.; Lee, Sandra; Journet, Michel; Kowal, Jason J.; Cai, Dongwei; Larsen, Robert D.; Reider, Paul J.
CS Department of Process Research, Merck Research Laboratories, Rahway, NJ, 07065, USA
SO Tetrahedron Letters (2002), 43(39), 6957-6959
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 138:4699
GI



I



II

AB A general method for the monoalkylation of (+)-nopinone (I) was developed for a variety of carbon and heteroatom electrophiles to afford the kinetically controlled product II with high diastereoselectivity (98% d.e.) and excellent yield (75-90%).
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
TI Process for producing bicyclic amino alcohol from (+)-nopinone
AN 2001:31442 CAPLUS
DN 134:101033
TI Process for producing bicyclic amino alcohol from (+)-nopinone
IN Honma, Tsunetoshi; Hiramatsu, Yoshiharu; Mitsumori, Susumu
PA Shionogi & Co., Ltd., Japan
SO PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001002334	A1	20010111	WO 2000-JP4171	20000626

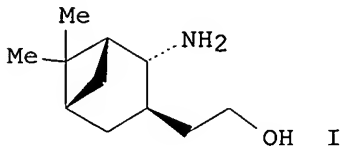
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

				JP 1999-188674	A 19990702
EP 1193243		A1	20020403	EP 2000-939160	20000626
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
				JP 1999-188674	A 19990702
				WO 2000-JP4171	W 20000626
JP 3730170		B2	20051221	JP 2001-507777	20000626
				JP 1999-188674	A 19990702
				WO 2000-JP4171	W 20000626
US 6723857		B1	20040420	US 2002-19670	20020102
				JP 1999-188674	A 19990702
				WO 2000-JP4171	W 20000626
US 2004171882		A1	20040902	US 2004-784930	20040225
				JP 1999-188674	A 19990702
				WO 2000-JP4171	W 20000626
				US 2002-19670	A3 20020102

OS CASREACT 134:101033; MARPAT 134:101033

GI



I

AB The bicyclic amino alc. I is prepared by reaction of (+)-nopinone with XCH2CO2R1 (X = halo; R1 = alkyl) in the presence of an additive and a base, followed by conversion of the product into an oxime, and reduction of the oxime. I is then converted in several steps to a known PGD2 antagonist.

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
TI Process for producing benzothiophenecarboxylic acid amide derivatives
AN 1999:640851 CAPLUS
DN 131:243177
TI Process for producing benzothiophenecarboxylic acid amide derivatives
IN Honma, Tsunetoshi; Hiramatsu, Yoshiharu; Okada, Tetsuo; Kakinuma, Makoto
PA Shionogi & Co., Ltd., Japan
SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9950261	A1	19991007	WO 1999-JP1617	19990330
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
			JP 1998-87311	A 19980331

CA 2326418		AA	19991007	CA 1999-2326418		19990330
				JP 1998-87311	A	19980331
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AU 9929602		A1	19991018	AU 1999-29602		19990330
AU 747860		B2	20020523			
				JP 1998-87311	A	19980331
				WO 1999-JP1617	W	19990330
BR 9909286		A	20001205	BR 1999-9286		19990330
				JP 1998-87311	A	19980331
				WO 1999-JP1617	W	19990330
EP 1069123		A1	20010117	EP 1999-910765		19990330
EP 1069123		B1	20041110			
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				JP 1998-87311	A	19980331
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TR 200002842		T2	20010122	TR 2000-200002842		19990330
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TW 458975		B	20011011	TW 1999-88105051		19990330
				JP 1998-87311	A	19980331
TR 200101802		T2	20011022	TR 2001-200101802		19990330
				JP 1998-87311	A	19980331
RU 2185380		C1	20020720	RU 2000-127103		19990330
				JP 1998-87311	A	19980331
				WO 1999-JP1617	W	19990330
JP 3340428		B2	20021105	JP 2000-541165		19990330
				JP 1998-87311	A	19980331
				WO 1999-JP1617	W	19990330
AT 282035		E	20041115	AT 1999-910765		19990330
				JP 1998-87311	A	19980331
				WO 1999-JP1617	W	19990330
ES 2233027		T3	20050601	ES 1999-910765		19990330
				JP 1998-87311	A	19980331
ZA 2000004721		A	20010308	ZA 2000-4721		20000907
				JP 1998-87311	A	19980331
NO 2000004918		A	20001128	NO 2000-4918		20000929
				JP 1998-87311	A	19980331
				WO 1999-JP1617	W	19990330
US 6399788		B1	20020604	US 2000-647353		20000929
				JP 1998-87311	A	19980331
				WO 1999-JP1617	W	19990330
JP 2002193898		A2	20020710	JP 2001-353060		20011119
JP 3629460		B2	20050316			
				JP 1998-87311	A	19980331
				JP 2000-541165	A3	19990330
US 2002115871		A1	20020822	US 2002-133353		20020429
US 6462241		B2	20021008			
				JP 1998-87311	A	19980331
				WO 1999-JP1617	W	19990330
				US 2000-647353	A3	20000929
US 6455741		B2	20020924	US 2002-133319		20020429
US 2002156297		A1	20021024			
				JP 1998-87311	A	19980331
				WO 1999-JP1617	W	19990330
				US 2000-647353	A3	20000929
US 6465662		B2	20021015	US 2002-133313		20020429
US 2002161242		A1	20021031			
				JP 1998-87311	A	19980331
				WO 1999-JP1617	W	19990330
				US 2000-647353	A3	20000929

OS CASREACT 131:243177; MARPAT 131:243177

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Disclosed are a process for producing 7-[(1R,2R,3S,5S)-2-(hydroxybenzo[b]thiophen-3-ylcarbonylamino)-10-norpinan-3-yl]-5-heptenoic acid compds. having PGD2 antagonism represented by formula (I; R = H, HO-protecting group; X = H, alkyl; the double bond is either in E or Z configuration), pharmaceutically acceptable salts thereof or hydrates of the same characterized by reacting an amino alc., namely [(1R,2R,3R,5S)-2-amino-10-norpinan-3-yl]ethanol, of formula (II) or its salt with a hydroxybenzo[b]thiophene-3-carboxylic acid compound of formula (III) or its reactive derivative, oxidizing the obtained product in the presence of 2,2,6,6,-tetramethylpiperidine-1-oxyls, and then reacting with an ylide under Wittig reaction conditions optionally followed by deblocking. The amino alc. (II) is prepared by reduction of oximes (IV; R2 = alkyl; R3 = H, alkyl). I are useful for the treatment of diseases related to failure of mast cell function caused by over-production of PGD and are used as remedies for systemic mast cell disease or mast cell activation disorder, allergic rhinitis, allergic conjunctivitis, nettle rash (urticaria), ischemic reperfusion disorder, and atopic dermatitis and as bronchodilators, antiasthmatics, and antiinflammatory agents (no data). II.PhCO2H (preparation given) was suspended in water, treated with 1 N aqueous HCl, and extracted with EtOAc to remove precipitated benzoic acid. The organic layer was washed with water and the combined aqueous layer was treated with 4 N aqueous NaOH under ice-cooling and then dropwise with a solution of 5-(benzenesulfonyloxy)benzo[b]thiophene-3-carbonyl chloride in THF over 15 min and stirred at the same temperature for 15 h to give 95.6% intermediate (V; R1 = CH2OH). The latter alc. was dissolved in EtOAc, treated with TEMPO and KBr and then dropwise with a solution of 0.41 N aqueous NaOCl (adjusted to pH 9.5 with NaHCO3) at -1° to 6° over 3 min, and stirred at the same temperature for 10 min to give 100% aldehyde (V; R1 = CHO) which underwent Wittig reaction with 4-carboxybutyltriphenylphosphonium bromide in the presence of Me3COK in THF under ice-cooling for 2 h followed by treatment with a mixture of 4 N aqueous NaOH and DMSO at 55° for 2 h to give II 76.0% (OR = 5-OH, X = H).

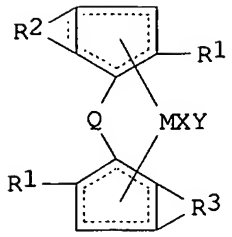
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
TI Catalyst components for polymerization of α-olefins and manufacture of α-olefin polymers
AN 1995:220794 CAPLUS
DN 122:188427
TI Catalyst components for polymerization of α-olefins and manufacture of α-olefin polymers
IN Sugano, Toshihiko; Uchino, Hidefumi; Takahama, Tomohiko
PA Mitsubishi Petrochemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06239917	A2	19940830	JP 1993-30932	19930219
				JP 1993-30932	19930219

OS MARPAT 122:188427

GI



I

AB α-Olefins are polymerized with catalysts comprising transition metal compds. I [R1 = H, C1-6 hydrocarbyl, Si-containing C1-12 hydrocarbyl; R2-3 = C3-30 hydrocarbylene; 1 of R2-3 have condensed ring; M = Group IVB-VIB transition metal; Q = C1-20 hydrocarbylene, (C1-20 hydrocarbyl-containing) silylene, (C1-20 hydrocarbyl-containing) germylene; X, Y = H, halo, (O-containing) C1-20 hydrocarbyl] and another component chosen from Al oxy compds., Lewis acids, and ionic compds. reactive with I. Thus, propylene was prepolymd. with methylalumoxane and dimethylsilylenebis[4-(5,9,9-trimethyltricyclo[6.1.1.0]deca-4,6-dien-3-yl)]zirconium dichloride (II; preparation given) at 20° and 1 kg/cm2G for 15 min and polymerized at 40° and 7 kg/cm2G for 2 h to give a polymer with catalyst activity 10.1 + 104 g-polymer/g-II, number average mol. weight 24.5 + 104, polydispersity 2.21, and m.p. 154.5°.

L4 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
TI Thromboxane A2 receptor antagonists. III. Synthesis and pharmacological activity of 6,6-dimethylbicyclo[3.1.1]heptane derivatives with a substituted sulfonylamino group at C-2
AN 1990:179482 CAPLUS
DN 112:179482
TI Thromboxane A2 receptor antagonists. III. Synthesis and pharmacological activity of 6,6-dimethylbicyclo[3.1.1]heptane derivatives with a substituted sulfonylamino group at C-2
AU Seno, Kaoru; Hagishita, Sanji
CS Shionogi Res. Lab., Shionogi and Co., Ltd., Osaka, 553, Japan
SO Chemical & Pharmaceutical Bulletin (1989), 37(6), 1524-33
CODEN: CPBTAL; ISSN: 0009-2363
DT Journal
LA English
OS CASREACT 112:179482
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Four stereoisomers of the title compds., I (1R,2S,3S,5S; 1R,2R,3S,5S; 1R,2S,3R,5S) and II (2R,3R), were synthesized from (-)-myrtenol and (+)-nopinone. The (1R,2R,3S,5S)-isomer of I had the most potent inhibitory activity against platelet aggregation and did not show partial agonist activity (shape change of platelets). The antipode I (1S,2S,3R,5R) and derivs. III (R = Me, PhCH2, biphenylyl, 2-naphthyl, p-O2NC6H4, p-MeOC6H4, PhCH2CH2CH2, PhCH2CH2, p-ClC6H4, o-ClC6H4, m-ClC6H4, p-EtC6H4, p-MeC6H4, p-FC6H4, p-HOC6H4) were also prepared The one-carbon

homologated compound IV was also prepared The inhibitory activities of these compds. against platelet aggregation were measured.

L4 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
TI Stereoselective formation from a (1S,5S)-(-)-verbenone-derived cyclopentadiene of dimeric and mixed titanium and zirconium dichloride complexes
AN 1989:231800 CAPLUS
DN 110:231800
TI Stereoselective formation from a (1S,5S)-(-)-verbenone-derived cyclopentadiene of dimeric and mixed titanium and zirconium dichloride complexes
AU Moriarty, Kevin J.; Rogers, Robin D.; Paquette, Leo A.
CS Evans Chem. Lab., Ohio State Univ., Columbus, OH, 43210, USA
SO Organometallics (1989), 8(6), 1512-17
CODEN: ORGND7; ISSN: 0276-7333
DT Journal
LA English
OS CASREACT 110:231800
GI For diagram(s), see printed CA Issue.
AB The optically active cyclopentadienide anion I undergoes reaction with $TiCl_3 \cdot 3THF$, $CpTiCl_3$, $ZrCl_4$, and Cp^*ZrCl_3 (Cp = η5-cyclopentadienyl, Cp* = η5-pentamethylcyclopentadienyl) to form a single complex in each instance. That coordination occurs above plane in I, its less sterically congested surface, was established by 1H and 13C NMR correlations and by x-ray crystallog. anal. of Ti complex II. When $CpZrCl_3$ is the coreactant, a 1:1 mixture of both possible stereoisomeric complexes results. Thus, I is a more facially discriminating species than is III, a finding that provides some mechanistic insight into the electronic character and mode of reaction of cyclopentadienide anions grafted to plane-nonsym. bicyclic frameworks.

=>
=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	30.35	197.94

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-4.50	-4.50

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PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS 2 "Ask CAS" for self-help around the clock

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NEWS  3   JAN 17  Pre-1988 INPI data added to MARPAT
NEWS  4   FEB 21  STN AnaVist, Version 1.1, lets you share your STN AnaVist
                  visualization results
NEWS  5   FEB 22  The IPC thesaurus added to additional patent databases on STN
NEWS  6   FEB 22  Updates in EPFULL; IPC 8 enhancements added
NEWS  7   FEB 27  New STN AnaVist pricing effective March 1, 2006
NEWS  8   MAR 03  Updates in PATDPA; addition of IPC 8 data without attributes
NEWS  9   MAR 22  EMBASE is now updated on a daily basis
NEWS 10   APR 03  New IPC 8 fields and IPC thesaurus added to PATDPAFULL
NEWS 11   APR 03  Bibliographic data updates resume; new IPC 8 fields and IPC
                  thesaurus added in PCTFULL
NEWS 12   APR 04  STN AnaVist $500 visualization usage credit offered
NEWS 13   APR 12  LINSPEC, learning database for INSPEC, reloaded and enhanced
NEWS 14   APR 12  Improved structure highlighting in FQHIT and QHIT display
                  in MARPAT
NEWS 15   APR 12  Derwent World Patents Index to be reloaded and enhanced during
                  second quarter; strategies may be affected
NEWS 16   MAY 10  CA/CAplus enhanced with 1900-1906 U.S. patent records
NEWS 17   MAY 11  KOREAPAT updates resume
NEWS 18   MAY 19  Derwent World Patents Index to be reloaded and enhanced
NEWS 19   MAY 30  IPC 8 Rolled-up Core codes added to CA/CAplus and
                  USPATFULL/USPAT2
NEWS 20   MAY 30  The F-Term thesaurus is now available in CA/CAplus
NEWS 21   JUN 02  The first reclassification of IPC codes now complete in
                  INPADOC

NEWS EXPRESS      FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
                  CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
                  AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
                  V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT
                  http://download.cas.org/express/v8.0-Discover/

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NEWS LOGIN     Welcome Banner and News Items
NEWS IPC8      For general information regarding STN implementation of IPC 8
NEWS X25       X.25 communication option no longer available after June 2006

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* * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 07:20:33 ON 15 JUN 2006

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PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
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SESSION RESUMED IN FILE 'REGISTRY' AT 07:23:21 ON 15 JUN 2006
FILE 'REGISTRY' ENTERED AT 07:23:21 ON 15 JUN 2006
COPYRIGHT (C) 2006 American Chemical Society (ACS)
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       1.32       1.53

=> e Bicyclo[3.1.1]heptane-3-acetic acid, 6,6-dimethyl-2-oxo-/cn
E1            1     BICYCLO (4.4.0) DECANE-3,4,8,9-TETRACARBOXYLIC ACID DIANHYDR
                    IDE-CYCLOHEXANE-1,2,4,5-TETRACARBOXYLIC ACID DIANHYDRIDE-4,4
                    '-DIAMINODIPHENYL METHANE POLYMER/CN
E2            1     BICYCLO (4.4.0) DECANE-3,4,8,9-TETRACARBOXYLIC ACID DIANHYDR
                    IDE-M-PHENYLENEDIAMINE POLYMER/CN
E3            0 --> BICYCLO3.1.1HEPTANE-3-ACETIC ACID, 6,6-DIMETHYL-2-OXO-/CN
E4            1     BICYCLO(0,1,3)HEXANE, 2,6,6-TRIMETHYL-/CN
E5            1     BICYCLO(0.1.3)HEXANE, 3,3-DIMETHYL-/CN
E6            1     BICYCLO(1.1.0)BUT-1(2)-ENE/CN
E7            1     BICYCLO(1.1.0)BUT-1(3)-EN-2-IUM-2-YLIDENE, 4-OXO-/CN
E8            1     BICYCLO(1.1.0)BUT-1(3)-EN-2-YL, 4-OXO-, ION(1-)/CN
E9            1     BICYCLO(1.1.0)BUT-1(3)-EN-2-YLIDENE/CN
E10           1     BICYCLO(1.1.0)BUT-1(3)-EN-2-YLIDENE, 4-OXO-/CN
E11           1     BICYCLO(1.1.0)BUT-1(3)-ENE/CN
E12           1     BICYCLO(1.1.0)BUT-1(3)-ENE, 2,2,4,4-TETRAFLUORO-/CN

=> e Bicyclo(3.1.1)heptane-3-acetic acid, 6,6-dimethyl-2-oxo-/cn
E1            1     BICYCLO(3.1.1)HEPTANE-3-ACETIC ACID, 6,6-DIMETHYL-2-METHYLEN
                    E-A-((4-METHYLPHENYL)SULFONYL)-, METHYL ESTER, (1R,3R,
                    5R)-/CN
E2            1     BICYCLO(3.1.1)HEPTANE-3-ACETIC ACID, 6,6-DIMETHYL-2-METHYLEN
                    E-A-((4-METHYLPHENYL)SULFONYL)-, METHYL ESTER, (1R,3S,
                    5R)-/CN
E3            0 --> BICYCLO(3.1.1)HEPTANE-3-ACETIC ACID, 6,6-DIMETHYL-2-OXO-/CN
E4            1     BICYCLO(3.1.1)HEPTANE-3-ACETIC ACID, 6,6-DIMETHYL-2-OXO-, ET
                    HYL ESTER, (1R,3R,5S)-/CN
E5            1     BICYCLO(3.1.1)HEPTANE-3-ACETIC ACID, 6,6-DIMETHYL-2-OXO-, ET
                    HYL ESTER, (1R,3S,5S)-/CN
E6            1     BICYCLO(3.1.1)HEPTANE-3-ACETIC ACID, 6,6-DIMETHYL-2-OXO-, ET
                    HYL ESTER, (1R-(1A,3A,5A))-/CN
E7            1     BICYCLO(3.1.1)HEPTANE-3-ACETIC ACID, 6,6-DIMETHYL-2-OXO-, ME
                    THYL ESTER/CN
E8            1     BICYCLO(3.1.1)HEPTANE-3-ACETONITRILE, 2-CYANO-2,6,6-TRIMETHY
                    L-4-OXO-, (1A,2B,3A,5A)-/CN
E9            1     BICYCLO(3.1.1)HEPTANE-3-ACETONITRILE, 6,6-DIMETHYL-2-METHYLE
                    NE-A,A-BIS(METHYLTHIO)-/CN
E10           1     BICYCLO(3.1.1)HEPTANE-3-ACETONITRILE, 6,6-DIMETHYL-2-OXO-, (
                    1R,3R,5S)-/CN
E11           1     BICYCLO(3.1.1)HEPTANE-3-BUTANAL, A,2,6,6-TETRAMETHYL-/
                    CN
E12           1     BICYCLO(3.1.1)HEPTANE-3-BUTANOIC ACID, A-FLUORO-6,6-DI
                    METHYL-2-(((5-((2-METHYL-1H-PYRROL-1-YL)SULFONYL)-2-THIENYL)
                    CARBONYL)AMINO)-, (1R,2R,3S,5S)-/CN

=> e4
L1            1 "BICYCLO(3.1.1)HEPTANE-3-ACETIC ACID, 6,6-DIMETHYL-2-OXO-, ETHYL
                 ESTER, (1R,3R,5S)-"/CN

=> d l1\
'L1\' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

The following are valid formats:

Substance information can be displayed by requesting individual
fields or predefined formats.  The predefined substance formats
```

are: (RN = CAS Registry Number)

REG - RN
SAM - Index Name, MF, and structure - no RN
FIDE - All substance data, except sequence data
IDE - FIDE, but only 50 names
SQIDE - IDE, plus sequence data
SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used
SQD - Protein sequence data, includes RN
SQD3 - Same as SQD, but 3-letter amino acid codes are used
SQN - Protein sequence name information, includes RN

CALC - Table of calculated properties
EPROP - Table of experimental properties
PROP - EPROP and CALC

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ABS -- Abstract
APPS -- Application and Priority Information
BIB -- CA Accession Number, plus Bibliographic Data
CAN -- CA Accession Number
CBIB -- CA Accession Number, plus Bibliographic Data (compressed)
IND -- Index Data
IPC -- International Patent Classification
PATS -- PI, SO
STD -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels
IBIB -- BIB, indented, with text labels
ISTD -- STD format, indented

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.
The MAX format is the same as ALL.
The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

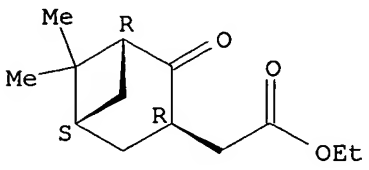
HELP DFIELDS -- To see a complete list of individual display fields.
HELP FORMATS -- To see detailed descriptions of the predefined formats.
ENTER DISPLAY FORMAT (IDE):end

=> d l1

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
RN 126264-10-6 REGISTRY
ED Entered STN: 06 Apr 1990
CN **Bicyclo[3.1.1]heptane-3-acetic acid, 6,6-dimethyl-2-oxo-, ethyl ester, (1R,3R,5S)- (9CI)** (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Bicyclo[3.1.1]heptane-3-acetic acid, 6,6-dimethyl-2-oxo-, ethyl ester, [1R-(1α,3α,5α)]-

FS STEREOSEARCH
MF C13 H20 O3
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, USPAT2, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> e5
L2 1 "BICYCLO(3.1.1)HEPTANE-3-ACETIC ACID, 6,6-DIMETHYL-2-OXO-, ETHYL ESTER, (1R,3S,5S)-"/CN

=> e6
L3 1 "BICYCLO(3.1.1)HEPTANE-3-ACETIC ACID, 6,6-DIMETHYL-2-OXO-, ETHYL ESTER, (1R-(1A,3A,5A))-"/CN

=> e7
L4 1 "BICYCLO(3.1.1)HEPTANE-3-ACETIC ACID, 6,6-DIMETHYL-2-OXO-, METHYL ESTER"/CN

=> e nopinone/cn
E1 1 NOPINOL, 2-PHENYL-/CN
E2 1 NOPINOL, 2-PROPYL-/CN
E3 1 --> NOPINONE/CN
E4 1 NOPINONE, A-BROMO-/CN
E5 1 NOPINONE, SEMICARBAZONE/CN
E6 1 NOPIRON WF/CN
E7 1 NOPLA KE 831/CN
E8 1 NOPOCURE 204, POLYMER WITH 1,6-HEXANEDIYL DI-2-PROPENOATE AND 2-((3-((1-OXO-2-PROPENYL)OXY)-2,2-BIS(((1-OXO-2-PROPENYL)OXY)METHYL)PROPOXY)METHYL)-2-(((1-OXO-2-PROPENYL)OXY)METHYL)-1,3-PROPANEDIYL DI-2/CN
E9 1 NOPOCURE 204, POLYMER WITH 1,6-HEXANEDIYL DI-2-PROPENOATE, 2-((3-((1-OXO-2-PROPENYL)OXY)-2,2-BIS(((1-OXO-2-PROPENYL)OXY)METHYL)PROPOXY)METHYL)-2-(((1-OXO-2-PROPENYL)OXY)METHYL)-1,3-PROPANEDIYL DI-2-PR/CN
E10 1 NOPOCURE 204, POLYMER WITH 2,2-BIS(((1-OXO-2-PROPENYL)OXY)METHYL)-1,3-PROPANEDIYL DI-2-PROPENOATE AND 2-((3-((1-OXO-2-PROPENYL)OXY)-2,2-BIS(((1-OXO-2-PROPENYL)OXY)METHYL)PROPOXY)METHYL)-2-(((1-OXO-2-P/CN
E11 1 NOPOCURE 204, POLYMER WITH 2-((3-((1-OXO-2-PROPENYL)OXY)-2,2-BIS(((1-OXO-2-PROPENYL)OXY)METHYL)PROPOXY)METHYL)-2-(((1-OXO-2-PROPENYL)OXY)METHYL)-1,3-PROPANEDIYL DI-2-PROPENOATE AND A,A',.A/CN
E12 1 NOPOCURE 204, POLYMER WITH 2-((3-((1-OXO-2-PROPENYL)OXY)-2,2-BIS(((1-OXO-2-PROPENYL)OXY)METHYL)PROPOXY)METHYL)-2-(((1-OXO-2-PROPENYL)OXY)METHYL)-1,3-PROPANEDIYL DI-2-PROPENOATE AND OXYBIS(METHYL-2,1-E/CN

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=> e3
L5            1 NOPINONE/CN

=> file caplus
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                        29.66      29.87

FILE 'CAPLUS' ENTERED AT 07:26:57 ON 15 JUN 2006
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FILE COVERS 1907 - 15 Jun 2006  VOL 144 ISS 25
FILE LAST UPDATED: 13 Jun 2006  (20060613/ED)

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They are available for your review at:

http://www.cas.org/infopolicy.html

=> l1 or l2 0r l3 or l4
MISSING OPERATOR L2 0R
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> l1 or l2 or l3 or l4
             4 L1
             1 L2
             4 L3
             1 L4
L6           5 L1 OR L2 OR L3 OR L4

=> l5
L7         260 L5

=> l6 and l7
L8           1 L6 AND L7

=> d l8 ti fbib abs

L8   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Catalyst components for polymerization of α-olefins and manufacture
     of α-olefin polymers
AN   1995:220794  CAPLUS
DN   122:188427
TI   Catalyst components for polymerization of α-olefins and manufacture
     of α-olefin polymers
IN   Sugano, Toshihiko; Uchino, Hidefumi; Takahama, Tomohiko
PA   Mitsubishi Petrochemical Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 11 pp.
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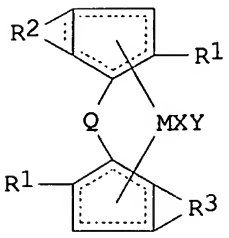
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 06239917	A2	19940830	JP 1993-30932	19930219
			JP 1993-30932	19930219

OS MARPAT 122:188427
GI

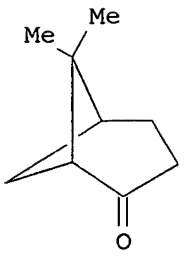


I

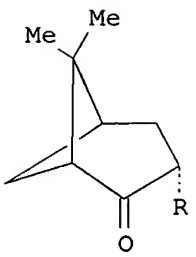
AB α-Olefins are polymerized with catalysts comprising transition metal compds. I [R1 = H, C1-6 hydrocarbyl, Si-containing C1-12 hydrocarbyl; R2-3 = C3-30 hydrocarbylene; 1 of R2-3 have condensed ring; M = Group IVB-VIB transition metal; Q = C1-20 hydrocarbylene, (C1-20 hydrocarbyl-containing) silylene, (C1-20 hydrocarbyl-containing) germylene; X, Y = H, halo, (O-containing) C1-20 hydrocarbyl] and another component chosen from Al oxy compds., Lewis acids, and ionic compds. reactive with I. Thus, propylene was prepolymd. with methylalumoxane and dimethylsilylenebis[4-(5,9,9-trimethyltricyclo[6.1.1.0]deca-4,6-dien-3-yl)]zirconium dichloride (II; preparation given) at 20° and 1 kg/cm2G for 15 min and polymerized at 40° and 7 kg/cm2G for 2 h to give a polymer with catalyst activity 10.1 + 104 g-polymer/g-II, number average mol. weight 24.5 + 104, polydispersity 2.21, and m.p. 154.5°.

=> d l6 1-5 ti fbib abs

L6 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
TI A general method for the highly diastereoselective, kinetically controlled alkylation of (+)-nopinone
AN 2002:675080 CAPLUS
DN 138:4699
TI A general method for the highly diastereoselective, kinetically controlled alkylation of (+)-nopinone
AU Campos, Kevin R.; Lee, Sandra; Journet, Michel; Kowal, Jason J.; Cai, Dongwei; Larsen, Robert D.; Reider, Paul J.
CS Department of Process Research, Merck Research Laboratories, Rahway, NJ, 07065, USA
SO Tetrahedron Letters (2002), 43(39), 6957-6959
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 138:4699
GI



I



II

AB A general method for the monoalkylation of (+)-nopinone (I) was developed for a variety of carbon and heteroatom electrophiles to afford the kinetically controlled product II with high diastereoselectivity (98% d.e.) and excellent yield (75-90%).

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
TI Process for producing bicyclic amino alcohol from (+)-nopinone
AN 2001:31442 CAPLUS
DN 134:101033
TI Process for producing bicyclic amino alcohol from (+)-nopinone
IN Honma, Tsunetoshi; Hiramatsu, Yoshiharu; Mitsumori, Susumu
PA Shionogi & Co., Ltd., Japan
SO PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001002334	A1	20010111	WO 2000-JP4171	20000626
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
			JP 1999-188674	A 19990702
EP 1193243	A1	20020403	EP 2000-939160	20000626
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
			JP 1999-188674	A 19990702
			WO 2000-JP4171	W 20000626
JP 3730170	B2	20051221	JP 2001-507777	20000626
			JP 1999-188674	A 19990702
			WO 2000-JP4171	W 20000626
US 6723857	B1	20040420	US 2002-19670	20020102
			JP 1999-188674	A 19990702
			WO 2000-JP4171	W 20000626
US 2004171882	A1	20040902	US 2004-784930	20040225
			JP 1999-188674	A 19990702
			WO 2000-JP4171	W 20000626
			US 2002-19670	A3 20020102

OS CASREACT 134:101033; MARPAT 134:101033

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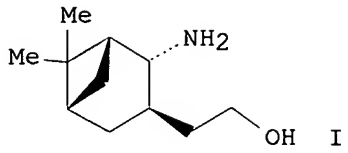

I

AB The bicyclic amino alc. I is prepared by reaction of (+)-nopinone with XCH2CO2R1 (X = halo; R1 = alkyl) in the presence of an additive and a base, followed by conversion of the product into an oxime, and reduction of the oxime. I is then converted in several steps to a known PGD2 antagonist.

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
TI Process for producing benzothiophenecarboxylic acid amide derivatives
AN 1999:640851 CAPLUS
DN 131:243177
TI Process for producing benzothiophenecarboxylic acid amide derivatives
IN Honma, Tsunetoshi; Hiramatsu, Yoshiharu; Okada, Tetsuo; Kakinuma, Makoto
PA Shionogi & Co., Ltd., Japan
SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9950261	A1	19991007	WO 1999-JP1617	19990330
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
			JP 1998-87311	A 19980331
CA 2326418	AA	19991007	CA 1999-2326418	19990330
			JP 1998-87311	A 19980331
			WO 1999-JP1617	W 19990330
AU 9929602	A1	19991018	AU 1999-29602	19990330
AU 747860	B2	20020523		
			JP 1998-87311	A 19980331
			WO 1999-JP1617	W 19990330
BR 9909286	A	20001205	BR 1999-9286	19990330
			JP 1998-87311	A 19980331
			WO 1999-JP1617	W 19990330
EP 1069123	A1	20010117	EP 1999-910765	19990330
EP 1069123	B1	20041110		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
			JP 1998-87311	A 19980331
			WO 1999-JP1617	W 19990330
TR 200002842	T2	20010122	TR 2000-200002842	19990330
			JP 1998-87311	A 19980331
TW 458975	B	20011011	TW 1999-88105051	19990330
			JP 1998-87311	A 19980331

TR 200101802	T2	20011022	TR 2001-200101802	19990330
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RU 2185380	C1	20020720	RU 2000-127103	19990330
			JP 1998-87311 A	19980331
			WO 1999-JP1617 W	19990330
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			WO 1999-JP1617 W	19990330
AT 282035	E	20041115	AT 1999-910765	19990330
			JP 1998-87311 A	19980331
			WO 1999-JP1617 W	19990330
ES 2233027	T3	20050601	ES 1999-910765	19990330
			JP 1998-87311 A	19980331
ZA 2000004721	A	20010308	ZA 2000-4721	20000907
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			JP 1998-87311 A	19980331
			WO 1999-JP1617 W	19990330
US 6399788	B1	20020604	US 2000-647353	20000929
			JP 1998-87311 A	19980331
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JP 2002193898	A2	20020710	JP 2001-353060	20011119
JP 3629460	B2	20050316		
			JP 1998-87311 A	19980331
			JP 2000-541165 A3	19990330
US 2002115871	A1	20020822	US 2002-133353	20020429
US 6462241	B2	20021008		
			JP 1998-87311 A	19980331
			WO 1999-JP1617 W	19990330
			US 2000-647353 A3	20000929
US 6455741	B2	20020924	US 2002-133319	20020429
US 2002156297	A1	20021024		
			JP 1998-87311 A	19980331
			WO 1999-JP1617 W	19990330
			US 2000-647353 A3	20000929
US 6465662	B2	20021015	US 2002-133313	20020429
US 2002161242	A1	20021031		
			JP 1998-87311 A	19980331
			WO 1999-JP1617 W	19990330
			US 2000-647353 A3	20000929

OS CASREACT 131:243177; MARPAT 131:243177

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Disclosed are a process for producing 7-[(1R,2R,3S,5S)-2-(hydroxybenzo[b]thiophen-3-ylcarbonylamino)-10-norpinan-3-yl]-5-heptenoic acid compds. having PGD2 antagonism represented by formula (I; R = H, HO-protecting group; X = H, alkyl; the double bond is either in E or Z configuration), pharmaceutically acceptable salts thereof or hydrates of the same characterized by reacting an amino alc., namely [(1R,2R,3R,5S)-2-amino-10-norpinan-3-yl]ethanol, of formula (II) or its salt with a hydroxybenzo[b]thiophene-3-carboxylic acid compound of formula (III) or its reactive derivative, oxidizing the obtained product in the presence of 2,2,6,6,-tetramethylpiperidine-1-oxyls, and then reacting with an ylide under Wittig reaction conditions optionally followed by deblocking. The amino alc. (II) is prepared by reduction of oximes (IV; R2 = alkyl; R3 = H, alkyl). I are useful for the treatment of diseases related to failure of mast cell function caused by over-production of PGD and are used as remedies for systemic mast cell disease or mast cell activation

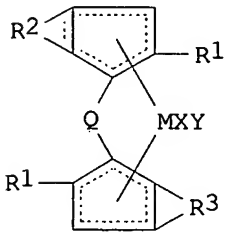
disorder, allergic rhinitis, allergic conjunctivitis, nettle rash (urticaria), ischemic reperfusion disorder, and atopic dermatitis and as bronchodilators, antiasthmatics, and antiinflammatory agents (no data). II.PhCO2H (preparation given) was suspended in water, treated with 1 N aqueous HCl, and extracted with EtOAc to remove precipitated benzoic acid. The organic layer was washed with water and the combined aqueous layer was treated with 4 N aqueous NaOH under ice-cooling and then dropwise with a solution of 5-(benzenesulfonyloxy)benzo[b]thiophene-3-carbonyl chloride in THF over 15 min and stirred at the same temperature for 15 h to give 95.6% intermediate (V; R1 = CH2OH). The latter alc. was dissolved in EtOAc, treated with TEMPO and KBr and then dropwise with a solution of 0.41 N aqueous NaOCl (adjusted to pH 9.5 with NaHCO3) at -1° to 6° over 3 min, and stirred at the same temperature for 10 min to give 100% aldehyde (V; R1 = CHO) which underwent Wittig reaction with 4-carboxybutyltriphenylphosphonium bromide in the presence of Me3COK in THF under ice-cooling for 2 h followed by treatment with a mixture of 4 N aqueous NaOH and DMSO at 55° for 2 h to give II 76.0% (OR = 5-OH, X = H).

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
TI Catalyst components for polymerization of α-olefins and manufacture of α-olefin polymers
AN 1995:220794 CAPLUS
DN 122:188427
TI Catalyst components for polymerization of α-olefins and manufacture of α-olefin polymers
IN Sugano, Toshihiko; Uchino, Hidefumi; Takahama, Tomohiko
PA Mitsubishi Petrochemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 06239917	A2	19940830	JP 1993-30932	19930219
			JP 1993-30932	19930219

OS MARPAT 122:188427
GI



I

AB α-Olefins are polymerized with catalysts comprising transition metal compds. I [R1 = H, C1-6 hydrocarbyl, Si-containing C1-12 hydrocarbyl; R2-3 = C3-30 hydrocarbylene; 1 of R2-3 have condensed ring; M = Group IVB-VIB

transition metal; Q = C1-20 hydrocarbylene, (C1-20 hydrocarbyl-containing) silylene, (C1-20 hydrocarbyl-containing) germylene; X, Y = H, halo, (O-containing) C1-20 hydrocarbyl] and another component chosen from Al oxy compds., Lewis acids, and ionic compds. reactive with I. Thus, propylene was prepolymd. with methylalumoxane and dimethylsilylenebis[4-(5,9,9-trimethyltricyclo[6.1.1.0]deca-4,6-dien-3-yl)]zirconium dichloride (II; preparation given) at 20° and 1 kg/cm2G for 15 min and polymerized at 40° and 7 kg/cm2G for 2 h to give a polymer with catalyst activity 10.1 + 104 g-polymer/g-II, number average mol. weight 24.5 + 104, polydispersity 2.21, and m.p. 154.5°.

L6 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
TI Thromboxane A2 receptor antagonists. III. Synthesis and pharmacological activity of 6,6-dimethylbicyclo[3.1.1]heptane derivatives with a substituted sulfonylamino group at C-2
AN 1990:179482 CAPLUS
DN 112:179482
TI Thromboxane A2 receptor antagonists. III. Synthesis and pharmacological activity of 6,6-dimethylbicyclo[3.1.1]heptane derivatives with a substituted sulfonylamino group at C-2
AU Seno, Kaoru; Hagishita, Sanji
CS Shionogi Res. Lab., Shionogi and Co., Ltd., Osaka, 553, Japan
SO Chemical & Pharmaceutical Bulletin (1989), 37(6), 1524-33
CODEN: CPBTAL; ISSN: 0009-2363
DT Journal
LA English
OS CASREACT 112:179482
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Four stereoisomers of the title compds., I (1R,2S,3S,5S; 1R,2R,3S,5S; 1R,2S,3R,5S) and II (2R,3R), were synthesized from (-)-myrtenol and (+)-nopinone. The (1R,2R,3S,5S)-isomer of I had the most potent inhibitory activity against platelet aggregation and did not show partial agonist activity (shape change of platelets). The antipode I (1S,2S,3R,5R) and derivs. III (R = Me, PhCH2, biphenylyl, 2-naphthyl, p-O2NC6H4, p-MeOC6H4, PhCH2CH2CH2, PhCH2CH2, p-ClC6H4, o-ClC6H4, m-ClC6H4, p-EtC6H4, p-MeC6H4, p-FC6H4, p-HOC6H4) were also prepared The one-carbon homologated compound IV was also prepared The inhibitory activities of these compds. against platelet aggregation were measured.

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	26.10	55.97
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-4.50	-4.50

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 07:39:18 ON 15 JUN 2006

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LOGINID:SSSPTA1623PAZ

PASSWORD:
* * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 07:40:42 ON 15 JUN 2006
FILE 'CAPLUS' ENTERED AT 07:40:42 ON 15 JUN 2006
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FULL ESTIMATED COST	26.10	55.97

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-4.50	-4.50

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	26.10	55.97

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-4.50	-4.50

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STRUCTURE FILE UPDATES: 14 JUN 2006 HIGHEST RN 887828-19-5
DICTIONARY FILE UPDATES: 14 JUN 2006 HIGHEST RN 887828-19-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

****
*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*
****

Structure search iteration limits have been increased. See HELP SLIMITS
for details.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

```
=> e N,N-dimethylpropyleneurea/cn
E1            1     N,N-DIMETHYLPROPYLENEDIAMINE DIHYDROCHLORIDE/CN
E2            1     N,N-DIMETHYLPROPYLENEDIAMINE-EPICHLOROHYDRIN COPOLYMER/CN
E3            0 --> N,N-DIMETHYLPROPYLENEUREA/CN
E4            1     N,N-DIMETHYLPROPYNAL/CN
E5            1     N,N-DIMETHYLPROPYNAMIDE/CN
E6            1     N,N-DIMETHYLPROTRIPTYLINE/CN
E7            1     N,N-DIMETHYLPROTRIPTYLINE BROMIDE/CN
E8            1     N,N-DIMETHYLPROTRIPTYLINE HYDROGEN PHOSPHATE/CN
E9            1     N,N-DIMETHYLPROTRIPTYLINE PICRATE/CN
E10           1     N,N-DIMETHYLPSEUDOMERUCATHINE/CN
E11           1     N,N-DIMETHYLPUTRESCINE/CN
E12           1     N,N-DIMETHYLPYRAZINECARBOXAMIDE/CN

=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.88      56.85

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                       0.00      -4.50

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FILE COVERS 1907 - 15 Jun 2006  VOL 144 ISS 25
FILE LAST UPDATED: 13 Jun 2006  (20060613/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

=> dimethylpropyleneurea
L9          138 DIMETHYLPROPYLENEUREA

=> alkylation
          96014 ALKYLATION
           2535 ALKYLATIONS
L10       96558 ALKYLATION
                (ALKYLATION OR ALKYLATIONS)

=> l9 and l10
L11           6 L9 AND L10

=> d l11 1-6 ti
```

L11 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
TI **Alkylation** of asymmetric phosphonamidates (part I)

L11 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
TI Synthesis and structure of functionalized cyclododecadiynes and -dienes

L11 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
TI A reductive homo-coupling polymerization of aromatic diisocyanates promoted by samarium iodide

L11 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
TI Use of N,N-**dimethylpropyleneurea** (DMPU) as solvent in the efficient preparation of enantiomerically pure secondary amines

L11 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
TI The ratio of induced recessive lethals to ring-X loss has prognostic value in terms of functionality of chemical mutagens in Drosophila melanogaster

L11 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
TI Stereoselective **alkylation** at C(α) of serine, glyceric acid, threonine, and tartaric acid involving heterocyclic enolates with exocyclic double bonds

=> DMPU
L12 285 DMPU

=> l10 and l12
L13 43 L10 AND L12

=> l10(l)l12
L14 31 L10(L)L12

=> d l14 21-31 ti

L14 ANSWER 21 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI Preparation of cyclic sulfamides used for the synthesis of HIV protease inhibitors via cyclization of protected linear diamino diols with SO2 precursors followed by alkylation

L14 ANSWER 22 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI A new synthesis of (±)-phoracantholide, (±)-dihydrorecifeiolide, and (±)-muscone via α-nitro ketones

L14 ANSWER 23 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI The synthesis of deuterated 4-2H-α-farnesene and 1-2H-α-farnesene

L14 ANSWER 24 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI Enantioselective synthesis of 2-alkyl substituted cysteines

L14 ANSWER 25 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI C-alkylation of sarcosine residues in cyclic tetrapeptides via lithium enolates

L14 ANSWER 26 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI C-Alkylation of peptides through polylithiated and lithium chloride solvated derivatives containing sarcosine lithium enolate units

L14 ANSWER 27 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI Replacement of carcinogenic solvent HMPA by DMI in insect sex pheromone synthesis

L14 ANSWER 28 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI trans-Disubstituted cyclohexadienes via sequential addition of a carbon nucleophile and an electrophile to (η6-benzene)tricarbonylchromium: scope of carbon electrophiles

L14 ANSWER 29 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI Mono- and dialkylation of derivatives of (1R,2S)-2-hydroxycyclopentanecarboxylic acid and -cyclohexanecarboxylic acid via bicyclic dioxanones: selective generation of three contiguous stereogenic centers on a cyclohexane ring

L14 ANSWER 30 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI 1,3-Dimethyl-2-oxohexahydropyrimidine (DMPU): an alternative to HMPT in moth sex pheromone synthesis

L14 ANSWER 31 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI Stereoselective alkylation at C(α) of serine, glyceric acid, threonine, and tartaric acid involving heterocyclic enolates with exocyclic double bonds

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	16.06	72.91

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-4.50

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 07:47:47 ON 15 JUN 2006

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PASSWORD:
* * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 08:11:40 ON 15 JUN 2006
FILE 'CAPLUS' ENTERED AT 08:11:40 ON 15 JUN 2006
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	16.06	72.91

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-4.50

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	16.06	72.91

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION

CA SUBSCRIBER PRICE 0.00 -4.50

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STRUCTURE FILE UPDATES: 14 JUN 2006 HIGHEST RN 887828-19-5
DICTIONARY FILE UPDATES: 14 JUN 2006 HIGHEST RN 887828-19-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

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```
**********************************************************************
*                                                                    *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005.  A new display format, IDERL, is now    *
* available and contains the CA role and document type information. *
*                                                                    *
**********************************************************************
```

Structure search iteration limits have been increased. See HELP SLIMITS
for details.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

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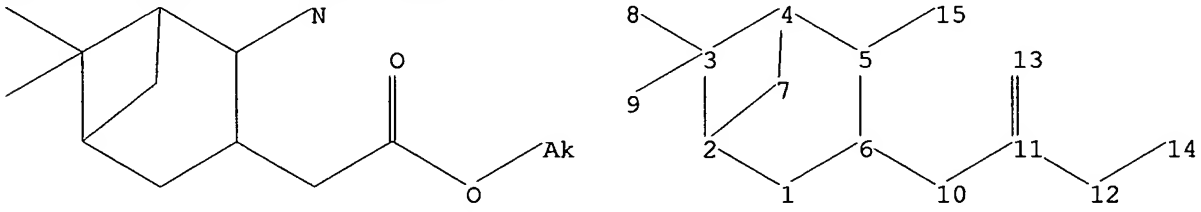
Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files\10784930\10784930 compd (IV).str



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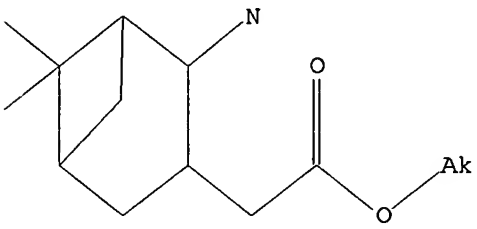
ring nodes :
1 2 3 4 5 6 7
chain bonds :
3-8 3-9 5-15 6-10 10-11 11-12 11-13 12-14
ring bonds :
1-2 1-6 2-3 2-7 3-4 4-5 4-7 5-6
exact/norm bonds :
1-2 1-6 2-3 2-7 3-4 4-5 4-7 5-6 5-15 11-12 11-13 12-14
exact bonds :
3-8 3-9 6-10 10-11

Hydrogen count :
1:>= minimum 2 5:>= minimum 1 6:>= minimum 1 10:>= minimum 2
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS

L15 STRUCTURE UPLOADED

=> d l15
L15 HAS NO ANSWERS
L15 STR



Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SCREEN SEARCH COMPLETED - 8 TO ITERATE

100.0% PROCESSED 8 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS: 8 TO 329
PROJECTED ANSWERS: 0 TO 0

L16 0 SEA SSS SAM L15

=> search l15 sss full
FULL SEARCH INITIATED 08:12:28 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 290 TO ITERATE

100.0% PROCESSED 290 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

L17 0 SEA SSS FUL L15

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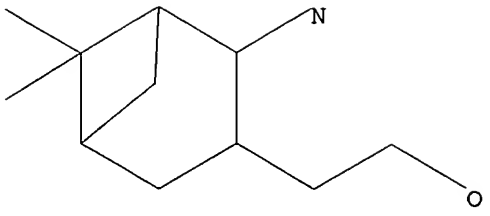

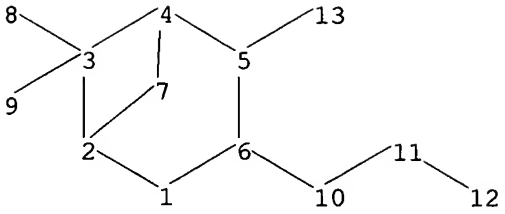

chain nodes :
8 9 10 11 12 13
ring nodes :
1 2 3 4 5 6 7
chain bonds :
3-8 3-9 5-13 6-10 10-11 11-12
ring bonds :
1-2 1-6 2-3 2-7 3-4 4-5 4-7 5-6
exact/norm bonds :
1-2 1-6 2-3 2-7 3-4 4-5 4-7 5-6 5-13 11-12
exact bonds :
3-8 3-9 6-10 10-11

Hydrogen count :
1:>= minimum 2 5:>= minimum 1 6:>= minimum 1 10:>= minimum 2 11:>= minimum 2
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS

L18 STRUCTURE UPLOADED

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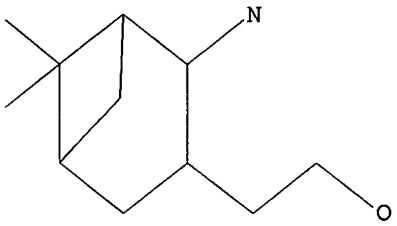
L18 HAS NO ANSWERS
L18 STR



Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SCREEN SEARCH COMPLETED - 8 TO ITERATE

100.0% PROCESSED 8 ITERATIONS 3 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 8 TO 329
PROJECTED ANSWERS: 3 TO 163

L19 3 SEA SSS SAM L18

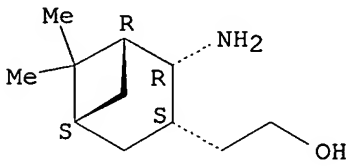
=> dscan
0 DSCAN
L20 0 DSCAN

=> d scan
L20 HAS NO ANSWERS

=> d scan l19

L19 3 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Bicyclo[3.1.1]heptane-3-ethanol, 2-amino-6,6-dimethyl-, (1R,2R,3S,5S)-
(9CI)
MF C11 H21 N O
CI COM

Absolute stereochemistry. Rotation (-).

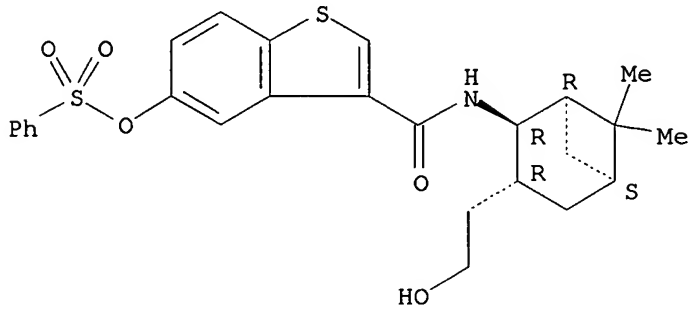


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

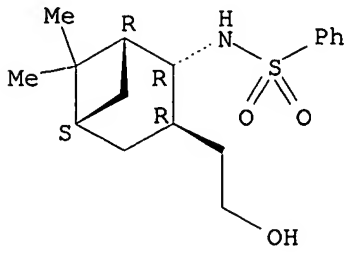
L19 3 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Benzo[b]thiophene-3-carboxamide, N-[(1R,2R,3R,5S)-3-(2-hydroxyethyl)-6,6-
dimethylbicyclo[3.1.1]hept-2-yl]-5-[(phenylsulfonyl)oxy]- (9CI)
MF C26 H29 N O5 S2

Absolute stereochemistry. Rotation (+).



L19 3 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Benzenesulfonamide, N-[3-(2-hydroxyethyl)-6,6-dimethylbicyclo[3.1.1]hept-2-
yl]-, [1R-(1α,2β,3α,5α)]- (9CI)
MF C17 H25 N O3 S

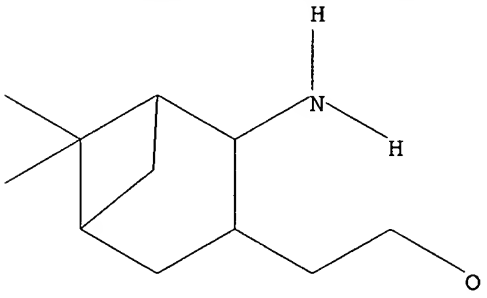
Absolute stereochemistry.

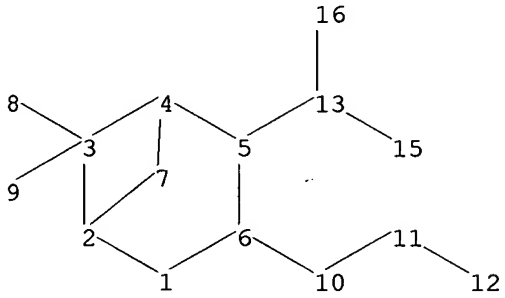


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=>
Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files\10784930\10784930 NH2 fixed compd (IV) .str





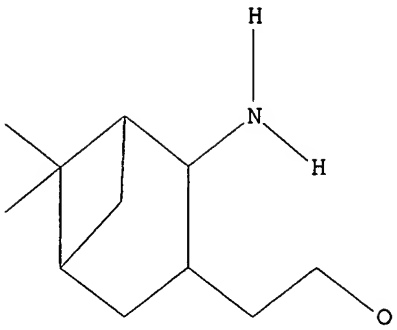
chain nodes :
8 9 10 11 12 13 15 16
ring nodes :
1 2 3 4 5 6 7
chain bonds :
3-8 3-9 5-13 6-10 10-11 11-12 13-15 13-16
ring bonds :
1-2 1-6 2-3 2-7 3-4 4-5 4-7 5-6
exact/norm bonds :
1-2 1-6 2-3 2-7 3-4 4-5 4-7 5-6 5-13 11-12
exact bonds :
3-8 3-9 6-10 10-11 13-15 13-16

Hydrogen count :
1:>= minimum 2 5:>= minimum 1 6:>= minimum 1 10:>= minimum 2 11:>= minimum 2
13:>= minimum 2
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 15:CLASS 16:CLASS

L21 STRUCTURE UPLOADED

=> d l21
L21 HAS NO ANSWERS

L21 STR



Structure attributes must be viewed using STN Express query preparation.

=> search l21 sss sam
SAMPLE SEARCH INITIATED 08:18:54 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 8 TO ITERATE

100.0% PROCESSED 8 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

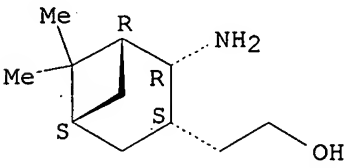
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 8 TO 329
PROJECTED ANSWERS: 1 TO 80

L22 1 SEA SSS SAM L21

=> d scan

L22 1 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Bicyclo[3.1.1]heptane-3-ethanol, 2-amino-6,6-dimethyl-, (1R,2R,3S,5S)-(9CI)
MF C11 H21 N O
CI COM

Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> e Bicyclo(1.1.1)heptane-3-ethanol, 2-amino-6,6-dimethyl-,/cn
E1 2 BICYCLO(1.1.1)DISILOXANE, PHOSPHINE DERIV./CN
E2 1 BICYCLO(1.1.1)DISILOXANE-1,3-DIYLBIS(OXY)/CN
E3 0 --> BICYCLO(1.1.1)HEPTANE-3-ETHANOL, 2-AMINO-6,6-DIMETHYL-,/CN
E4 1 BICYCLO(1.1.1)PENT-1-ENE/CN

```
E5            1     BICYCLO(1.1.1)PENT-1-ENE, 2,3-DICHLORO-/CN
E6            1     BICYCLO(1.1.1)PENT-1-ENE, 4-METHYLENE-/CN
E7            1     BICYCLO(1.1.1)PENT-1-YL/CN
E8            1     BICYCLO(1.1.1)PENT-1-YL RADICAL/CN
E9            1     BICYCLO(1.1.1)PENT-1-YL, 3-(1,1-DIMETHYLETHYL)-/CN
E10           1     BICYCLO(1.1.1)PENT-1-YL, 3-(DIMETHYLAMINO)-/CN
E11           1     BICYCLO(1.1.1)PENT-1-YL, 3-(DIPHENYLMETHYLENE)-/CN
E12           1     BICYCLO(1.1.1)PENT-1-YL, 3-(METHOXYCARBONYL)-/CN

=> e Bicyclo(3.1.1)heptane-3-ethanol, 2-amino-6,6-dimethyl-,/cn
E1            1     BICYCLO(3.1.1)HEPTANE-3-ETHANAMINE, N-(2,2-DIMETHYLPROPYL)-.
                    ALPHA.,2,6,6-TETRAMETHYL-, (1S-(1A,2B,3A(S*
                    ),5A))-/CN
E2            1     BICYCLO(3.1.1)HEPTANE-3-ETHANAMINE, N-(2,2-DIMETHYLPROPYL)-.
                    ALPHA.,2,6,6-TETRAMETHYL-, LITHIUM SALT, (1S-(1A,2.BET
                    A.,3A(S*),5A))-/CN
E3            0 --> BICYCLO(3.1.1)HEPTANE-3-ETHANOL, 2-AMINO-6,6-DIMETHYL-,/CN
E4            1     BICYCLO(3.1.1)HEPTANE-3-ETHANOL, 2-AMINO-6,6-DIMETHYL-, (1R,
                    2R,3R,5S)-/CN
E5            1     BICYCLO(3.1.1)HEPTANE-3-ETHANOL, 2-AMINO-6,6-DIMETHYL-, (1R,
                    2R,3R,5S)-, BENZOATE (SALT)/CN
E6            1     BICYCLO(3.1.1)HEPTANE-3-ETHANOL, 2-AMINO-6,6-DIMETHYL-, (1R,
                    2R,3S,5S)-/CN
E7            1     BICYCLO(3.1.1)HEPTANE-3-ETHANOL, 2-AMINO-6,6-DIMETHYL-, (1R,
                    2R,3S,5S)-, BENZOATE (SALT)/CN
E8            1     BICYCLO(3.1.1)HEPTANE-3-ETHANOL, 2-AMINO-6,6-DIMETHYL-, (1R,
                    2S,3S,5S)-/CN
E9            1     BICYCLO(3.1.1)HEPTANE-3-ETHANOL, 2-AMINO-6,6-DIMETHYL-, (1R,
                    2S,3S,5S)-, BENZOATE (SALT)/CN
E10           1     BICYCLO(3.1.1)HEPTANE-3-ETHANOL, 2-AMINO-6,6-DIMETHYL-, (1R-
                    (1A,2B,3A,5A))-/CN
E11           1     BICYCLO(3.1.1)HEPTANE-3-ETHANOL, 2-AMINO-6,6-DIMETHYL-, (1R-
                    (1A,2B,3A,5A))-, BENZOATE (SALT)/CN
E12           1     BICYCLO(3.1.1)HEPTANE-3-ETHANOL, 6,6-DIMETHYL-A-PHENYL
                    -, (3(S)-(1A,3B,5A))-/CN

=> ee4
L23           2 EE4

=> d l23

L23  ANSWER 1 OF 2  REGISTRY  COPYRIGHT 2006 ACS on STN
RN   213888-43-8  REGISTRY
ED   Entered STN:  08 Nov 1998
CN   DNA (human clone EE4 sEST (secreted expressed sequence tag)) (9CI)
     (CA INDEX NAME)
FS   NUCLEIC ACID SEQUENCE
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, USPATFULL

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***
               1 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)


=> e4
L24           1 "BICYCLO(3.1.1)HEPTANE-3-ETHANOL, 2-AMINO-6,6-DIMETHYL-, (1R,2R,
                3R,5S)-"/CN
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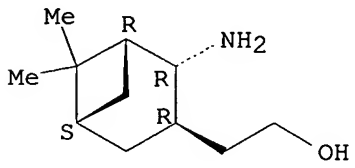
=> d l24

L24 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
RN 126264-12-8 REGISTRY
ED Entered STN: 06 Apr 1990
CN **Bicyclo[3.1.1]heptane-3-ethanol, 2-amino-6,6-dimethyl-, (1R,2R,3R,5S)- (9CI)** (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Bicyclo[3.1.1]heptane-3-ethanol, 2-amino-6,6-dimethyl-, [1R-(1α,2β,3α,5α)]-
FS STEREOSEARCH
MF C11 H21 N O
CI COM
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, USPAT2, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE)
5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> e5
L25 1 "BICYCLO(3.1.1)HEPTANE-3-ETHANOL, 2-AMINO-6,6-DIMETHYL-, (1R,2R, 3R,5S)-, BENZOATE (SALT)"/CN

=> e6
L26 1 "BICYCLO(3.1.1)HEPTANE-3-ETHANOL, 2-AMINO-6,6-DIMETHYL-, (1R,2R, 3S,5S)-"/CN

=> e7
L27 1 "BICYCLO(3.1.1)HEPTANE-3-ETHANOL, 2-AMINO-6,6-DIMETHYL-, (1R,2R, 3S,5S)-, BENZOATE (SALT)"/CN

=> e8
L28 1 "BICYCLO(3.1.1)HEPTANE-3-ETHANOL, 2-AMINO-6,6-DIMETHYL-, (1R,2S, 3S,5S)-"/CN

=> e9
L29 1 "BICYCLO(3.1.1)HEPTANE-3-ETHANOL, 2-AMINO-6,6-DIMETHYL-, (1R,2S, 3S,5S)-, BENZOATE (SALT)"/CN

=> e10
L30 1 "BICYCLO(3.1.1)HEPTANE-3-ETHANOL, 2-AMINO-6,6-DIMETHYL-, (1R-(1. ALPHA.,2B,3A,5A))-"/CN

=> e11
L31 1 "BICYCLO(3.1.1)HEPTANE-3-ETHANOL, 2-AMINO-6,6-DIMETHYL-, (1R-(1. ALPHA.,2B,3A,5A))-, BENZOATE (SALT)"/CN

=> file caplus
COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION
FULL ESTIMATED COST | 226.26 | 299.17

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION
CA SUBSCRIBER PRICE | 0.00 | -4.50

FILE 'CAPLUS' ENTERED AT 08:23:26 ON 15 JUN 2006
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FILE COVERS 1907 - 15 Jun 2006 VOL 144 ISS 25
FILE LAST UPDATED: 14 Jun 2006 (20060614/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

=> l25 or l26 or l27 or l28 or l29 or l30 or l31
4 L25
3 L26
1 L27
2 L28
1 L29
5 L30
4 L31
L32 6 L25 OR L26 OR L27 OR L28 OR L29 OR L30 OR L31

=> d l32 1-6 ti fbib abs

L32 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
TI Process for producing bicyclic amino alcohol from (+)-nopinone
AN 2001:31442 CAPLUS
DN 134:101033
TI Process for producing bicyclic amino alcohol from (+)-nopinone
IN Honma, Tsunetoshi; Hiramatsu, Yoshiharu; Mitsumori, Susumu
PA Shionogi & Co., Ltd., Japan
SO PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

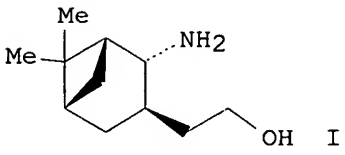
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001002334	A1	20010111	WO 2000-JP4171	20000626

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU,

LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

			JP 1999-188674	A	19990702
EP 1193243	A1	20020403	EP 2000-939160		20000626
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
			JP 1999-188674	A	19990702
			WO 2000-JP4171	W	20000626
JP 3730170	B2	20051221	JP 2001-507777		20000626
			JP 1999-188674	A	19990702
			WO 2000-JP4171	W	20000626
US 6723857	B1	20040420	US 2002-19670		20020102
			JP 1999-188674	A	19990702
			WO 2000-JP4171	W	20000626
US 2004171882	A1	20040902	US 2004-784930		20040225
			JP 1999-188674	A	19990702
			WO 2000-JP4171	W	20000626
			US 2002-19670	A3	20020102

OS CASREACT 134:101033; MARPAT 134:101033
GI



I

AB The bicyclic amino alc. I is prepared by reaction of (+)-nopinone with XCH2CO2R1 (X = halo; R1 = alkyl) in the presence of an additive and a base, followed by conversion of the product into an oxime, and reduction of the oxime. I is then converted in several steps to a known PGD2 antagonist.
RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
TI Anti-itching agents containing PGD2 antagonists
AN 1999:783967 CAPLUS
DN 132:26854
TI Anti-itching agents containing PGD2 antagonists
IN Arimura, Akinori
PA Shionogi & Co., Ltd., Japan
SO PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9962555	A1	19991209	WO 1999-JP2820	19990528

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,

ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

			JP 1998-154332	A	19980603
CA 2333868	AA	19991209	CA 1999-2333868		19990528
			JP 1998-154332	A	19980603
			WO 1999-JP2820	W	19990528
AU 9939551	A1	19991220	AU 1999-39551		19990528
			JP 1998-154332	A	19980603
			WO 1999-JP2820	W	19990528
EP 1084711	A1	20010321	EP 1999-922538		19990528
EP 1084711	B1	20050511			

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

			JP 1998-154332	A	19980603
			WO 1999-JP2820	W	19990528
AT 295183	E	20050515	AT 1999-922538		19990528
			JP 1998-154332	A	19980603
			WO 1999-JP2820	W	19990528
ES 2241283	T3	20051016	ES 1999-922538		19990528
			JP 1998-154332	A	19980603
US 2002058693	A1	20020516	US 2001-881799		20010618
US 6506789	B2	20030114			
			JP 1998-154332	A	19980603
			US 2000-700283	A1	20001113
US 2003027854	A1	20030206	US 2002-127442		20020423
			JP 1998-154332	A	19980603
			WO 1999-JP2820	W	19990528
			US 2000-700283	B1	20001113
			US 2001-881799	A1	20010618

OS MARPAT 132:26854

AB Disclosed are PGD2 antagonists, e.g., (5Z)-7-[(1R,2R,3S,5S)-2-(5-hydroxybenzo[b]thiophene-3-yl-carbonylamino)-6,6-dimethylbicyclo[3.1.1]hept-3-yl]-5-heptenoic acid (I), and pharmaceutically acceptable salts thereof or hydrates of the same which have an excellent effect of preventing or treating itching and therefore are useful as drugs. The PGD2 antagonist I showed inhibitory effect on scratching behavior of C57BL mice stimulated by compound 48/80 or antigen. Also, a tablet containing I 40, hydroxypropylcellulose 3.6, Mg stearate 0.4, corn starch 18, and lactose 58 mg was prepared

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

TI Process for producing benzothiophenecarboxylic acid amide derivatives

AN 1999:640851 CAPLUS

DN 131:243177

TI Process for producing benzothiophenecarboxylic acid amide derivatives

IN Honma, Tsunetoshi; Hiramatsu, Yoshiharu; Okada, Tetsuo; Kakinuma, Makoto

PA Shionogi & Co., Ltd., Japan

SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9950261	A1	19991007	WO 1999-JP1617	19990330

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,

ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

			JP 1998-87311	A	19980331
CA 2326418	AA	19991007	CA 1999-2326418		19990330
			JP 1998-87311	A	19980331
			WO 1999-JP1617	W	19990330
AU 9929602	A1	19991018	AU 1999-29602		19990330
AU 747860	B2	20020523			
			JP 1998-87311	A	19980331
			WO 1999-JP1617	W	19990330
BR 9909286	A	20001205	BR 1999-9286		19990330
			JP 1998-87311	A	19980331
			WO 1999-JP1617	W	19990330
EP 1069123	A1	20010117	EP 1999-910765		19990330
EP 1069123	B1	20041110			

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

			JP 1998-87311	A	19980331
			WO 1999-JP1617	W	19990330
TR 200002842	T2	20010122	TR 2000-200002842		19990330
			JP 1998-87311	A	19980331
TW 458975	B	20011011	TW 1999-88105051		19990330
			JP 1998-87311	A	19980331
TR 200101802	T2	20011022	TR 2001-200101802		19990330
			JP 1998-87311	A	19980331
RU 2185380	C1	20020720	RU 2000-127103		19990330
			JP 1998-87311	A	19980331
			WO 1999-JP1617	W	19990330
JP 3340428	B2	20021105	JP 2000-541165		19990330
			JP 1998-87311	A	19980331
			WO 1999-JP1617	W	19990330
AT 282035	E	20041115	AT 1999-910765		19990330
			JP 1998-87311	A	19980331
			WO 1999-JP1617	W	19990330
ES 2233027	T3	20050601	ES 1999-910765		19990330
			JP 1998-87311	A	19980331
ZA 2000004721	A	20010308	ZA 2000-4721		20000907
			JP 1998-87311	A	19980331
NO 2000004918	A	20001128	NO 2000-4918		20000929
			JP 1998-87311	A	19980331
			WO 1999-JP1617	W	19990330
US 6399788	B1	20020604	US 2000-647353		20000929
			JP 1998-87311	A	19980331
			WO 1999-JP1617	W	19990330
JP 2002193898	A2	20020710	JP 2001-353060		20011119
JP 3629460	B2	20050316			
			JP 1998-87311	A	19980331
			JP 2000-541165	A3	19990330
US 2002115871	A1	20020822	US 2002-133353		20020429
US 6462241	B2	20021008			
			JP 1998-87311	A	19980331
			WO 1999-JP1617	W	19990330
			US 2000-647353	A3	20000929
US 6455741	B2	20020924	US 2002-133319		20020429
US 2002156297	A1	20021024			
			JP 1998-87311	A	19980331
			WO 1999-JP1617	W	19990330
			US 2000-647353	A3	20000929
US 6465662	B2	20021015	US 2002-133313		20020429
US 2002161242	A1	20021031			
			JP 1998-87311	A	19980331
			WO 1999-JP1617	W	19990330
			US 2000-647353	A3	20000929

OS CASREACT 131:243177; MARPAT 131:243177
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Disclosed are a process for producing 7-[(1R,2R,3S,5S)-2-(hydroxybenzo[b]thiophen-3-ylcarbonylamino)-10-norpinan-3-yl]-5-heptenoic acid compds. having PGD2 antagonism represented by formula (I; R = H, HO-protecting group; X = H, alkyl; the double bond is either in E or Z configuration), pharmaceutically acceptable salts thereof or hydrates of the same characterized by reacting an amino alc., namely [(1R,2R,3R,5S)-2-amino-10-norpinan-3-yl]ethanol, of formula (II) or its salt with a hydroxybenzo[b]thiophene-3-carboxylic acid compound of formula (III) or its reactive derivative, oxidizing the obtained product in the presence of 2,2,6,6,-tetramethylpiperidine-1-oxyls, and then reacting with an ylide under Wittig reaction conditions optionally followed by deblocking. The amino alc. (II) is prepared by reduction of oximes (IV; R2 = alkyl; R3 = H, alkyl). I are useful for the treatment of diseases related to failure of mast cell function caused by over-production of PGD and are used as remedies for systemic mast cell disease or mast cell activation disorder, allergic rhinitis, allergic conjunctivitis, nettle rash (urticaria), ischemic reperfusion disorder, and atopic dermatitis and as bronchodilators, antiasthmatics, and antiinflammatory agents (no data). II.PhCO2H (preparation given) was suspended in water, treated with 1 N aqueous HCl, and extracted with EtOAc to remove precipitated benzoic acid. The organic layer was washed with water and the combined aqueous layer was treated with 4 N aqueous NaOH under ice-cooling and then dropwise with a solution of 5-(benzenesulfonyloxy)benzo[b]thiophene-3-carbonyl chloride in THF over 15 min and stirred at the same temperature for 15 h to give 95.6% intermediate (V; R1 = CH2OH). The latter alc. was dissolved in EtOAc, treated with TEMPO and KBr and then dropwise with a solution of 0.41 N aqueous NaOCl (adjusted to pH 9.5 with NaHCO3) at -1° to 6° over 3 min, and stirred at the same temperature for 10 min to give 100% aldehyde (V; R1 = CHO) which underwent Wittig reaction with 4-carboxybutyltriphenylphosphonium bromide in the presence of Me3COK in THF under ice-cooling for 2 h followed by treatment with a mixture of 4 N aqueous NaOH and DMSO at 55° for 2 h to give II 76.0% (OR = 5-OH, X = H).
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
TI Process for producing 5-hydroxybenzo[b]thiophene-3-carboxylic acid derivatives
AN 1999:640850 CAPLUS
DN 131:243176
TI Process for producing 5-hydroxybenzo[b]thiophene-3-carboxylic acid derivatives
IN Honma, Tsunetoshi; Hiramatsu, Yoshiharu
PA Shionogi & Co., Ltd., Japan
SO PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI WO 9950260 A1 19991007 WO 1999-JP1616 19990330
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RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
JP 1998-85819 A 19980331

CA 2326419 AA 19991007 CA 1999-2326419 19990330
JP 1998-85819 A 19980331
WO 1999-JP1616 W 19990330

AU 9929601 A1 19991018 AU 1999-29601 19990330
AU 745129 B2 20020314
JP 1998-85819 A 19980331
WO 1999-JP1616 W 19990330

BR 9909290 A 20001205 BR 1999-9290 19990330
JP 1998-85819 A 19980331
WO 1999-JP1616 W 19990330

EP 1069122 A1 20010117 EP 1999-910764 19990330
EP 1069122 B1 20050629
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
JP 1998-85819 A 19980331
WO 1999-JP1616 W 19990330

TR 200002839 T2 20010122 TR 2000-200002839 19990330
JP 1998-85819 A 19980331

TR 200101628 T2 20020722 TR 2001-200101628 19990330
JP 1998-85819 A 19980331

RU 2186065 C1 20020727 RU 2000-127108 19990330
JP 1998-85819 A 19980331
WO 1999-JP1616 W 19990330

CN 1117743 B 20030813 CN 1999-804788 19990330
JP 1998-85819 A 19980331

JP 3455181 B2 20031014 JP 2000-541164 19990330
JP 1998-85819 A 19980331
WO 1999-JP1616 W 19990330

EP 1528060 A1 20050504 EP 2004-26501 19990330
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JP 1998-85819 A 19980331
EP 1999-910764 A3 19990330

AT 298747 E 20050715 AT 1999-910764 19990330
JP 1998-85819 A 19980331
WO 1999-JP1616 W 19990330

ES 2244179 T3 20051201 ES 1999-910764 19990330
JP 1998-85819 A 19980331

ZA 2000004720 A 20010309 ZA 2000-4720 20000907
JP 1998-85819 A 19980331

NO 2000004919 A 20001128 NO 2000-4919 20000929
JP 1998-85819 A 19980331
WO 1999-JP1616 W 19990330

US 6320060 B1 20011120 US 2000-647354 20000929
JP 1998-85819 A 19980331
WO 1999-JP1616 W 19990330

US 2002016476 A1 20020207 US 2001-962189 20010926
US 6346628 B2 20020212
JP 1998-85819 A 19980331
WO 1999-JP1616 W 19990330
US 2000-647354 A3 20000929

US 2002026061 A1 20020228 US 2001-962439 20010926
US 6495702 B2 20021217

				JP 1998-85819	A 19980331
				WO 1999-JP1616	W 19990330
				US 2000-647354	A3 20000929
	JP 2002167383	A2	20020611	JP 2001-353051	20011119
	JP 3621373	B2	20050216		
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				JP 2000-541164	A3 19990330
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				JP 1998-85819	A 19980331

OS CASREACT 131:243176; MARPAT 131:243176

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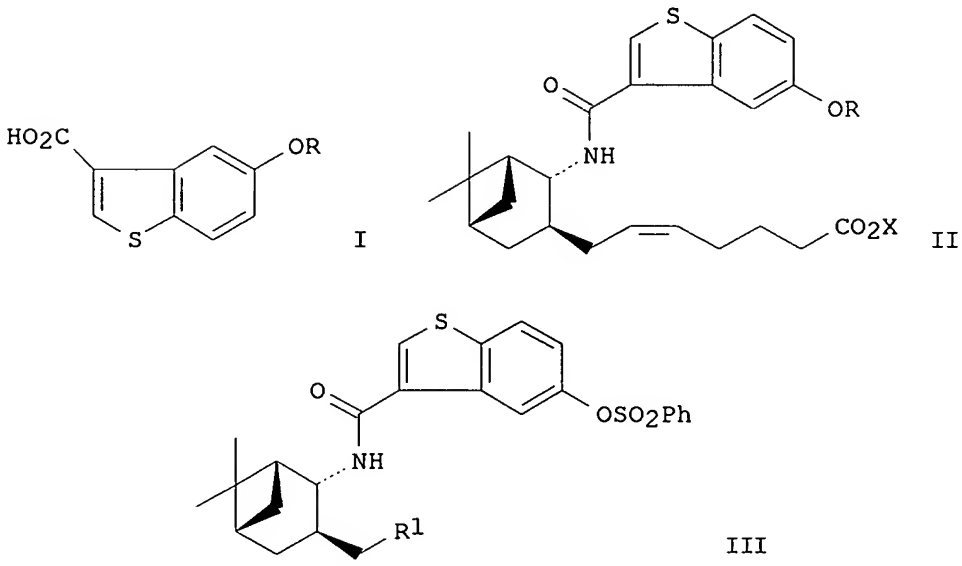

AB Disclosed are a process for producing benzothiophenic acid derivs. (I; R = H, HO-protecting group) which are useful as starting materials for producing drugs and a process for producing 7-[(1R,2R,3S,5S)-2-(5-hydroxybenzo[b]thiophen-3-ylcarbonylamino)-10-norpinan-3-yl]-5-heptenoic acid derivs. (II; R = H, HO-producing group; X = H, alkyl; the double bond is either in E or Z configuration), which are specific PGD2 antagonists, by using the above derivs. (I). II are useful for the treatment of diseases related to failure of mast cell function caused by over-production of PGD2 and are used as remedies for systemic mast cell disease or mast cell activation disorder, allergic rhinitis, allergic conjunctivitis, nettle rash (urticaria), ischemic reperfusion disorder, and atopic dermatitis and as bronchodilators, antiasthmatics, and antiinflammatory agents (no data). Thus, 4-mercaptophenol was alkylated by propargyl bromide in the presence of Et3N in EtOAc under ice-cooling for .apprx.2 h and then sulfonated by benzenesulfonyl chloride in the presence of Et3N under ice-cooling for .apprx.1.5 h and at room temperature for 30 min to give 100% crude 4-(propargylthio)phenyl benzenesulfonate. The latter compound was oxidized by 31% aqueous H2O2 and formic acid in MeOH for 3.5 h to give 100% crude 4-(propargylsulfinyl)phenyl benzenesulfonate which was dissolved in 1,2-dimethoxyethane and refluxed for 4 h, treated with water and p-MeC6H4SO3H.H2O, and refluxed for 2 h to give 100% crude 5-benzenesulfonyloxy-3-hydroxymethylbenzo[b]thiophene. The latter compound was oxidized by TEMPO and an aqueous solution of 0.81 N NaOCl (adjusted to pH 8.6 by adding 1 N H2SO4) at -1° to 8° for 40 min and then with 1

N aqueous NaOCl and 31% aqueous H2O2 at room temperature for 2 h to give 51.7% 5-(benzenesulfonyloxy)benzo[b]thiophene-3-carboxylic acid (I; R = benzenesulfonyl) which was refluxed with SOCl2 in the presence of one drop of DMF for 1.5 h to give 5-(benzenesulfonyloxy)benzo[b]thiophene-3-carbonyl chloride. This compound was condensed with 2-[(1R,2R,3R,5S)-2-amino-10-norpinan-3-yl]ethanol in aqueous THF containing NaOH under ice-cooling for 1 h to give 95.6% intermediate (III; R1 = CH2OH) which was oxidized by oxalyl chloride/DMSO in dimethoxyethane at -55° to -60° for 30 min to give 100% aldehyde (III; R1 = CHO) and underwent Wittig reaction with 4-carboxybutyltriphenylphosphonium bromide in the presence of Me3COK in THF under ice-cooling for 2 h followed by treatment with a mixture of 4 N aqueous NaOH and DMSO at 55° for 2 h to give II 76.0% (R = X = H).

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
TI preparation of benzothiophenecarboxamide derivatives as PGD2 antagonists
AN 1998:402435 CAPLUS
DN 129:81869
TI preparation of benzothiophenecarboxamide derivatives as PGD2 antagonists
IN Honma, Tsunetoshi; Hiramatsu, Yoshiharu; Arimura, Akinori
PA Shionogi & Co., Ltd., Japan
SO PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

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PI	WO 9825919	A1	19980618	WO 1997-JP4527	19971210
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				JP 1997-254001	A 19970919
	ZA 9711039	A	19980615	ZA 1997-11039	19971209
				JP 1996-333495	A 19961213
	CA 2274591	AA	19980618	CA 1997-2274591	19971210
	CA 2274591	C	20050614		
				JP 1996-333495	A 19961213
				JP 1997-254001	A 19970919
				WO 1997-JP4527	W 19971210
	AU 9854097	A1	19980703	AU 1998-54097	19971210
	AU 718958	B2	20000504		
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				JP 1997-254001	A 19970919
				WO 1997-JP4527	W 19971210
	EP 944614	A1	19990929	EP 1997-947866	19971210
	EP 944614	B1	20020911		
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				JP 1996-333495	A 19961213
				JP 1997-254001	A 19970919
				WO 1997-JP4527	W 19971210
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	CN 1105112	B	20030409		
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				JP 1997-254001	A 19970919

			WO 1997-JP4527	W	19971210
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			JP 1996-333495	A	19961213
			JP 1997-254001	A	19970919
			WO 1997-JP4527	W	19971210
JP 2000514824	T2	20001107	JP 1998-526492		19971210
JP 3215441	B2	20011009			
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			WO 1997-JP4527	W	19971210
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			JP 1997-254001	A	19970919
			WO 1997-JP4527	W	19971210
IL 130660	A1	20020310	IL 1997-130660		19971210
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			JP 1997-254001	A	19970919
			WO 1997-JP4527	W	19971210
NZ 336143	A	20020531	NZ 1997-336143		19971210
			JP 1996-333495	A	19961213
			JP 1997-254001	A	19970919
			WO 1997-JP4527	W	19971210
AT 223911	E	20020915	AT 1997-947866		19971210
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			JP 1997-254001	A	19970919
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PT 944614	T	20030131	PT 1997-947866		19971210
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			JP 1997-254001	A	19970919
ES 2181039	T3	20030216	ES 1997-947866		19971210
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			JP 1997-254001	A	19970919
IL 145863	A1	20030624	IL 1997-145863		19971210
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			IL 1997-130660	A3	19971210
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			WO 1997-JP4527	W	19971210
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			JP 1997-254001	A	19970919
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			WO 1997-JP4527	W	19971210
TW 438790	B	20010607	TW 1997-86118667		19971211
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US 6083974	A	20000704	US 1999-308176		19990517
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			JP 1997-254001	A	19970919
			WO 1997-JP4527	W	19971210
NO 9902838	A	19990720	NO 1999-2838		19990610
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			JP 1997-254001	A	19970919
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HK 1020045	A1	20021213	HK 1999-104492		19991013

				JP 1996-333495	A 19961213
				JP 1997-254001	A 19970919
				WO 1997-JP4527	W 19971210
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				JP 1996-333495	A 19961213
				JP 1997-254001	A 19970919

OS MARPAT 129:81869
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. I and II (R = H, alkyl, alkoxy, halo, hydroxy, acyloxy. (Un)substituted arylsulfonyloxy; X = H, alkyl; the chain double bond may be E or Z) and their pharmaceutically acceptable salts were prepared as agents having PGD2-antagonistic activities, inhibitory activities against infiltration of eosinophils, and being useful as a drug for treating diseases, such as systemic mastocytosis and disorder of systemic mast cell activation, as well as tracheal contraction, asthma, allergic rhinitis, allergic conjunctivitis, urticaria, ischemic reperfusion injury, inflammation and atopic dermatitis. Thus, the bicycloheptyl heptenoate III was treated with 5-acetoxybenzo[b]thiophene-3-carbonyl chloride followed by hydrolysis to give the benzo[b]thiophenylcarbonylamino bicycloheptylheptenoate IV (R = H, Na). The binding IC50 of IV (R = H) with PGD2 receptor was 0.4 nM.
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
TI Thromboxane A2 receptor antagonists. III. Synthesis and pharmacological activity of 6,6-dimethylbicyclo[3.1.1]heptane derivatives with a substituted sulfonylamino group at C-2
AN 1990:179482 CAPLUS
DN 112:179482
TI Thromboxane A2 receptor antagonists. III. Synthesis and pharmacological activity of 6,6-dimethylbicyclo[3.1.1]heptane derivatives with a substituted sulfonylamino group at C-2
AU Seno, Kaoru; Hagishita, Sanji
CS Shionogi Res. Lab., Shionogi and Co., Ltd., Osaka, 553, Japan
SO Chemical & Pharmaceutical Bulletin (1989), 37(6), 1524-33
CODEN: CPBTAL; ISSN: 0009-2363
DT Journal
LA English
OS CASREACT 112:179482
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Four stereoisomers of the title compds., I (1R,2S,3S,5S; 1R,2R,3S,5S; 1R,2S,3R,5S) and II (2R,3R), were synthesized from (-)-myrtenol and (+)-nopinone. The (1R,2R,3S,5S)-isomer of I had the most potent inhibitory activity against platelet aggregation and did not show partial agonist activity (shape change of platelets). The antipode I (1S,2S,3R,5R) and derivs. III (R = Me, PhCH2, biphenylyl, 2-naphthyl, p-O2NC6H4, p-MeOC6H4, PhCH2CH2CH2, PhCH2CH2, p-ClC6H4, o-ClC6H4, m-ClC6H4, p-EtC6H4, p-MeC6H4, p-FC6H4, p-HOC6H4) were also prepared The one-carbon homologated compound IV was also prepared The inhibitory activities of these compds. against platelet aggregation were measured.

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 NEWS  4  FEB 21  STN AnaVist, Version 1.1, lets you share your STN AnaVist
                  visualization results
 NEWS  5  FEB 22  The IPC thesaurus added to additional patent databases on STN
 NEWS  6  FEB 22  Updates in EPFULL; IPC 8 enhancements added
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NEWS  7  FEB 27  New STN AnaVist pricing effective March 1, 2006
NEWS  8  MAR 03  Updates in PATDPA; addition of IPC 8 data without attributes
NEWS  9  MAR 22  EMBASE is now updated on a daily basis
NEWS 10  APR 03  New IPC 8 fields and IPC thesaurus added to PATDPAFULL
NEWS 11  APR 03  Bibliographic data updates resume; new IPC 8 fields and IPC
                 thesaurus added in PCTFULL
NEWS 12  APR 04  STN AnaVist $500 visualization usage credit offered
NEWS 13  APR 12  LINSPEC, learning database for INSPEC, reloaded and enhanced
NEWS 14  APR 12  Improved structure highlighting in FQHIT and QHIT display
                 in MARPAT
NEWS 15  APR 12  Derwent World Patents Index to be reloaded and enhanced during
                 second quarter; strategies may be affected
NEWS 16  MAY 10  CA/CAplus enhanced with 1900-1906 U.S. patent records
NEWS 17  MAY 11  KOREAPAT updates resume
NEWS 18  MAY 19  Derwent World Patents Index to be reloaded and enhanced
NEWS 19  MAY 30  IPC 8 Rolled-up Core codes added to CA/CAplus and
                 USPATFULL/USPAT2
NEWS 20  MAY 30  The F-Term thesaurus is now available in CA/CAplus
NEWS 21  JUN 02  The first reclassification of IPC codes now complete in
                 INPADOC

NEWS EXPRESS     FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
                 CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
                 AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
                 V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT
                 http://download.cas.org/express/v8.0-Discover/

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FILE LAST UPDATED: 14 Jun 2006 (20060614/ED)

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=> aluminum hydride
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           297 ALUMINUMS
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                  (ALUMINUM OR ALUMINUMS)
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DICTIONARY FILE UPDATES: 14 JUN 2006 HIGHEST RN 887828-19-5

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Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

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=> e Silane,
((6,6-dimethylbicyclo(3.1.1)hept-2-en-2-yl)oxy)(1,1-dimethylethyl)dimethyl/cn
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E2            1      SILANE, ((6,6-DIMETHYLBICYCLO(3.1.1)HEPT-2-EN-2-YL)METHYL)TR
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E3            0 --> SILANE, ((6,6-DIMETHYLBICYCLO(3.1.1)HEPT-2-EN-2-YL)OXY)(1,1-
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E4            1      SILANE, ((6,6-DIMETHYLBICYCLO(3.1.1)HEPT-2-EN-2-YL)OXY)(1,1-
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E6            1      SILANE, ((6,6-DIMETHYLBICYCLO(3.1.1)HEPT-2-EN-2-YL)OXY)TRIME
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                     HYLPHENYL-, (1S-(1A,2A,5A))-/CN
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                     HYLPHENYL-, (1S-(1A,2B,5A))-/CN
E9            1      SILANE, ((6,6-DIMETHYLBICYCLO(3.1.1)HEPT-2-YL)METHOXY)TRIMET
                     HYL-/CN
E10           1      SILANE, ((6,6-DIMETHYLBICYCLO(3.1.1)HEPT-2-YL)METHYL)(2',5'-
                     DIMETHYL(1,1'-BIPHENYL)-3-YL)DIMETHYL-/CN
E11           1      SILANE, ((6,6-DIMETHYLBICYCLO(3.1.1)HEPT-2-YL)METHYL)(2',5'-
                     DIMETHYL(1,1'-BIPHENYL)-4-YL)DIMETHYL-/CN
E12           1      SILANE, ((6,6-DIMETHYLBICYCLO(3.1.1)HEPT-2-YL)METHYL)(3-((4-
                     (((6,6-DIMETHYLBICYCLO(3.1.1)HEPT-2-YL)METHYL)DIMETHYLSILYL)
                     PHENYL)ETHYNYL)PHENYL)DIMETHYL-/CN

=> e4
L2            1 "SILANE, ((6,6-DIMETHYLBICYCLO(3.1.1)HEPT-2-EN-2-YL)OXY)(1,1-DIM
                ETHYLETHYL)DIMETHYL-"/CN

=> d 12
```
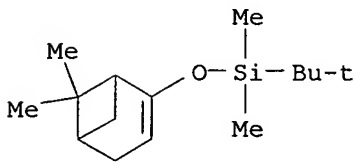

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
RN 100015-15-4 REGISTRY
ED Entered STN: 01 Feb 1986
CN **Silane, [(6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl)oxy](1,1-dimethylethyl)dimethyl- (9CI)** (CA INDEX NAME)
FS 3D CONCORD
MF C15 H28 O Si
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)



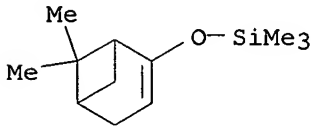
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> e5
L3 1 "SILANE, ((6,6-DIMETHYLBICYCLO(3.1.1)HEPT-2-EN-2-YL)OXY)TRIMETHYL-"/CN

=> d l3

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
RN 106861-99-8 REGISTRY
ED Entered STN: 28 Feb 1987
CN **Silane, [(6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl)oxy]trimethyl- (9CI)** (CA INDEX NAME)
FS 3D CONCORD
MF C12 H22 O Si
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

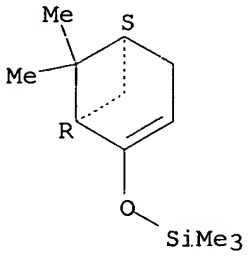
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> e6
L4 1 "SILANE, ((6,6-DIMETHYLBICYCLO(3.1.1)HEPT-2-EN-2-YL)OXY)TRIMETHYL-, (1R)-"/CN

=> d l4

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
RN 72453-33-9 REGISTRY
ED Entered STN: 16 Nov 1984
CN Silane, [[(1R,5S)-6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl]oxy]trimethyl-
(9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **Silane, [(6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl)oxy]trimethyl-,**
(1R)-
FS STEREOSEARCH
MF C12 H22 O Si
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1907 TO DATE)
7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> e nopinone/cn

E1	1		NOPINOL, 2-PHENYL-/CN
E2	1		NOPINOL, 2-PROPYL-/CN
E3	1	-->	NOPINONE/CN
E4	1		NOPINONE, A-BROMO-/CN
E5	1		NOPINONE, SEMICARBAZONE/CN
E6	1		NOPIRON WF/CN
E7	1		NOPLA KE 831/CN
E8	1		NOPOCURE 204, POLYMER WITH 1,6-HEXANEDIYL DI-2-PROPENOATE AN D 2-((3-((1-OXO-2-PROPENYL)OXY)-2,2-BIS(((1-OXO-2-PROPENYL)O XY)METHYL)PROPOXY)METHYL)-2-(((1-OXO-2-PROPENYL)OXY)METHYL)- 1,3-PROPANEDIYL DI-2/CN
E9	1		NOPOCURE 204, POLYMER WITH 1,6-HEXANEDIYL DI-2-PROPENOATE, 2 -((3-((1-OXO-2-PROPENYL)OXY)-2,2-BIS(((1-OXO-2-PROPENYL)OXY) METHYL)PROPOXY)METHYL)-2-(((1-OXO-2-PROPENYL)OXY)METHYL)-1,3 -PROPANEDIYL DI-2-PR/CN
E10	1		NOPOCURE 204, POLYMER WITH 2,2-BIS(((1-OXO-2-PROPENYL)OXY)ME THYL)-1,3-PROPANEDIYL DI-2-PROPENOATE AND 2-((3-((1-OXO-2-PR OPENYL)OXY)-2,2-BIS(((1-OXO-2-PROPENYL)OXY)METHYL)PROPOXY)ME THYL)-2-(((1-OXO-2-P/CN
E11	1		NOPOCURE 204, POLYMER WITH 2-((3-((1-OXO-2-PROPENYL)OXY)-2,2 -BIS(((1-OXO-2-PROPENYL)OXY)METHYL)PROPOXY)METHYL)-2-(((1-OX O-2-PROPENYL)OXY)METHYL)-1,3-PROPANEDIYL DI-2-PROPENOATE AND A,A',.A/CN
E12	1		NOPOCURE 204, POLYMER WITH 2-((3-((1-OXO-2-PROPENYL)OXY)-2,2 -BIS(((1-OXO-2-PROPENYL)OXY)METHYL)PROPOXY)METHYL)-2-(((1-OX O-2-PROPENYL)OXY)METHYL)-1,3-PROPANEDIYL DI-2-PROPENOATE AND OXYBIS(METHYL-2,1-E/CN

```
=> e3
L5            1 NOPINONE/CN

=> file caplus
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                        26.94      33.56

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FILE LAST UPDATED: 14 Jun 2006  (20060614/ED)

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=> l2 or l3 or l4
             1 L2
             1 L3
             7 L4
L6           9 L2 OR L3 OR L4

=> l5
L7         261 L5

=> (/prepl2 or l3 or l4)
MISSING TERM '(/PREPL2'

=> (l2 or l3 or l4)/prep
QUALIFICATION NOT VALID FOR L2
Field code qualifications can only be applied to text
terms.

=> d l6 1-9 ti

L6   ANSWER 1 OF 9  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   A general method for the highly diastereoselective, kinetically controlled
     alkylation of (+)-nopinone

L6   ANSWER 2 OF 9  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Process for producing bicyclic amino alcohol from (+)-nopinone

L6   ANSWER 3 OF 9  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Carbon-13 magnetic resonance studies.  124.  Preparative ring expansions
     of bicyclic ketones by homoketonization of cyclopropoxide analogs
```

L6 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
TI Carbon-13 magnetic resonance studies. 120. The Simmons-Smith reaction with some silyl enol ethers. Unusual ring expansions of some norcamphors

L6 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
TI Electronic absorption and circular dichroism spectra of the perturbed coplanar cis-diene chromophore in deuterium- and methyl-substituted 7,7-dimethylbicyclo[4.1.1]octa-2,4-dienes

L6 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
TI Highly efficient synthesis of (+)-nootkatone from (-)-β-pinene

L6 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
TI Nootkatone and vetivone compounds

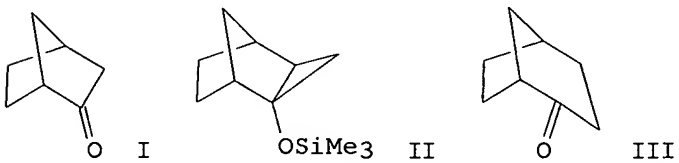
L6 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
TI Highly efficient synthesis of (+)-nootkatone from (-)-β-pinene

L6 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
TI Synthetic study of (+)-nootkatone from (-)-β-pinene

=> l6 and l7
L8 3 L6 AND L7

=> d l8 1-3 ti fbib abs

L8 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
TI Carbon-13 magnetic resonance studies. 124. Preparative ring expansions of bicyclic ketones by homoketonization of cyclopropoxide analogs
AN 1987:101776 CAPLUS
DN 106:101776
TI Carbon-13 magnetic resonance studies. 124. Preparative ring expansions of bicyclic ketones by homoketonization of cyclopropoxide analogs
AU Patel, Vijay; Ragauskas, Arthur J.; Stothers, J. B.
CS Dep. Chem., Univ. West. Ontario, London, ON, N6A 5B7, Can.
SO Canadian Journal of Chemistry (1986), 64(7), 1440-9
CODEN: CJCHAG; ISSN: 0008-4042
DT Journal
LA English
OS CASREACT 106:101776
GI

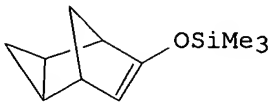


I II III

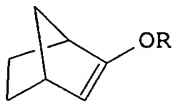
AB Homoketonization of some readily prepared cyclopropoxides provides a new synthetic method for ring expansion of the [2.2.1] and [2.2.2] ring systems. Cyclopropanation of the trimethylsilyl enol ethers derived from a variety of polycyclic ketones affords the required cyclopropyl silyl ethers, which may be ketonized directly or hydrolyzed to the corresponding cyclopropanols before ketonization. The results for fourteen examples serve to define the scope of the ring expansion process, and the silyl enol ethers, cyclopropyl silyl ethers, and most of the corresponding cyclopropanols have been characterized by 13C NMR. The stereochem. of the ketonization leading to ring expansion was established by

deuterium-labeling expts. Thus, bicyclic ketone I was converted to the trimethylsilyl enol ether, which underwent cyclopropanation with CH2I2 in presence of a Zn-Ag couple and the resulting cyclopropyl derivative II was treated with NaOH/MeOH to give ring expansion product III.

L8 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
TI Carbon-13 magnetic resonance studies. 120. The Simmons-Smith reaction with some silyl enol ethers. Unusual ring expansions of some norcamphors
AN 1986:69020 CAPLUS
DN 104:69020
TI Carbon-13 magnetic resonance studies. 120. The Simmons-Smith reaction with some silyl enol ethers. Unusual ring expansions of some norcamphors
AU Ragauskas, Arthur J.; Stothers, J. B.
CS Dep. Chem., Univ. West. Ontario, London, ON, N6A 5B7, Can.
SO Canadian Journal of Chemistry (1985), 63(11), 2969-74
CODEN: CJCHAG; ISSN: 0008-4042
DT Journal
LA English
OS CASREACT 104:69020
GI



I



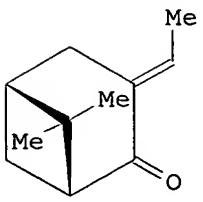
II

AB Simmons-Smith cyclopropanation of silyl enol ethers, e.g. I, II (R = Me3Si, Me3CSiMe2), of polycyclic ketones was studied. Product compns. depended on concns. of reactants, and tert-butyldimethylsilyl derivs. gave ring-expanded allylic ethers more efficiently than did the corresponding trimethylsilyl derivs.

L8 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
TI Nootkatone and vetivone compounds
AN 1980:639700 CAPLUS
DN 93:239700
TI Nootkatone and vetivone compounds
IN Yanami, Tetsuji; Miyashita, Masaaki; Yoshikoshi, Akira; Akiyama, Takashi
PA Hasegawa, T., Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 42 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 55045649	A2	19800331	JP 1978-119142	19780929
JP 62009097	B4	19870226		
			JP 1978-119142 A	19780929

GI



I

AB Eighteen nootakone and vetivone compds. were prepared and used as perfumes. Thus, 42 mL MeCHO in EtOH was added to a mixture of 69 g (+)-nopinone and 33 g KOH in EtOH over 1 h at 1-5°, the mixture stirred 74 h at 5°, 133 g 4-MeC6H4SO3H added, and the whole stirred (isomerization) 3 h at room temperature to give 67.2 g (+)-3-trans-ethylidenenopinone (I).

```
=> logoff hold
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    16.25      49.81

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                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -2.25      -2.25

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FULL ESTIMATED COST                                    16.25      49.81

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -2.25      -2.25

=> dissolving metal
         79098 DISSOLVING
             2 DISSOLVINGS
         79099 DISSOLVING
                 (DISSOLVING OR DISSOLVINGS)
       1652256 METAL
        835648 METALS
       2004917 METAL
                 (METAL OR METALS)
L9         609 DISSOLVING METAL
                 (DISSOLVING(W)METAL)

=> aluminum hydride
        926666 ALUMINUM
           297 ALUMINUMS
        926727 ALUMINUM
                 (ALUMINUM OR ALUMINUMS)
        100989 HYDRIDE
         24196 HYDRIDES
```

```
        108855 HYDRIDE
                  (HYDRIDE OR HYDRIDES)
L10       8892 ALUMINUM HYDRIDE
                  (ALUMINUM(W)HYDRIDE)

=> oxime
         43647 OXIME
         15549 OXIMES
L11      48361 OXIME
                  (OXIME OR OXIMES)

=> l9 and l10
L12          1 L9 AND L10

=> l11 and l12
L13          0 L11 AND L12

=> d l12 ti fbib abs

L12  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Synthesis of a new ketone and alcohol with C2 symmetry;
     (S,S,S,S)-tricyclo[6.3.0.03,7]undecan-2-one and (S,S,S,S)-
     tricyclo[6.3.0.03,7]undecan-2-ol
AN   1992:83264  CAPLUS
DN   116:83264
TI   Synthesis of a new ketone and alcohol with C2 symmetry;
     (S,S,S,S)-tricyclo[6.3.0.03,7]undecan-2-one and (S,S,S,S)-
     tricyclo[6.3.0.03,7]undecan-2-ol
AU   McIntosh, John M.; Cassidy, Kenneth C.
CS   Dep. Chem., Univ. Windsor, Windsor, ON, N9B 3P4, Can.
SO   Tetrahedron:  Asymmetry (1991), 2(10), 1053-62
     CODEN: TASYE3; ISSN: 0957-4166
DT   Journal
LA   English
GI
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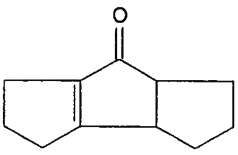
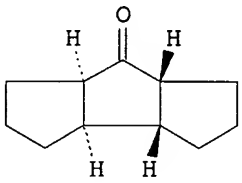
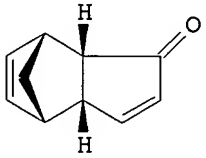


5



3



13

AB **Dissolving metal** reduction of known tricyclic enone 5 affords predominantly the racemic form of title ketone 3 whereas catalytic reduction gives the meso isomer. Neither ketone 3 nor alc. 4 could be satisfactorily resolved. Asym. synthesis of (-)-3 and (+)-4 (ee=91%) was effected from ketone (+)-13.

```
=> l9(l)l11
L14          4 L9(L)L11

=> l10(l)l11
L15         82 L10(L)L11

=> d l15 72-82 ti
```

L15 ANSWER 72 OF 82 CAPLUS COPYRIGHT 2006 ACS on STN
TI Pyran, its analogs, and related compounds. XIII. Further study of the anomalous reduction of ketone **oximes** by lithium **aluminum hydride**

L15 ANSWER 73 OF 82 CAPLUS COPYRIGHT 2006 ACS on STN
TI Syntheses of benzo[b]- and benzo[j]phenanthridines

L15 ANSWER 74 OF 82 CAPLUS COPYRIGHT 2006 ACS on STN
TI Pyran series; its analogs and related compounds. VII. Peculiarities of reduction of 4-chromanone **oxime** and **oximes** of related ketones with lithium **aluminum hydride**

L15 ANSWER 75 OF 82 CAPLUS COPYRIGHT 2006 ACS on STN
TI Lithium **aluminum hydride**-aluminum chloride reduction of **oximes**

L15 ANSWER 76 OF 82 CAPLUS COPYRIGHT 2006 ACS on STN
TI Formation of homopiperazine rings by the lithium **aluminum hydride** catalyzed rearrangement of some piperidone **oximes** in the phenothiazine series

L15 ANSWER 77 OF 82 CAPLUS COPYRIGHT 2006 ACS on STN
TI Molecular rearrangements. VI. The rearrangement of **oximes** on reduction with lithium **aluminum hydride**

L15 ANSWER 78 OF 82 CAPLUS COPYRIGHT 2006 ACS on STN
TI Derivatives of **oximes**. II. Reduction of O- and N-alkyl **oximes** with lithium **aluminum hydride**

L15 ANSWER 79 OF 82 CAPLUS COPYRIGHT 2006 ACS on STN
TI Derivatives of **oximes**. II. Reduction of O- and N-alkyl **oximes** with lithium **aluminum hydride**

L15 ANSWER 80 OF 82 CAPLUS COPYRIGHT 2006 ACS on STN
TI Preparation of primary amines by reduction of **oximes** with lithium **aluminum hydrides** and by the Leuckart reaction

L15 ANSWER 81 OF 82 CAPLUS COPYRIGHT 2006 ACS on STN
TI Reduction of **oximes** with lithium **aluminum hydride**

L15 ANSWER 82 OF 82 CAPLUS COPYRIGHT 2006 ACS on STN
TI The reduction of **oximes** with lithium **aluminum hydride**

=> d l15 75 ti fbib abs

L15 ANSWER 75 OF 82 CAPLUS COPYRIGHT 2006 ACS on STN
TI Lithium **aluminum hydride**-aluminum chloride reduction of **oximes**
AN 1963:435104 CAPLUS
DN 59:35104
OREF 59:6234b-d
TI Lithium **aluminum hydride**-aluminum chloride reduction of **oximes**
AU Rerick, Mark N.; Trottier, Claude H.; Daignault, Ronald A.; DeFoe, John D.
CS Providence Coll., Providence, RI
SO Tetrahedron Letters (1963) 629-34
CODEN: TELEAY; ISSN: 0040-4039
DT Journal

LA Unavailable
AB Reduction of acetophenone oximes ArC(:NOH)Me (I) with LiAlH4 gave mixts, of 1-arylethylamines ArCH(NH2)Me (II), and N-ethylanilines ArNHEt (III). A series of I and other ketone oximes was reduced with LiAlH4 and the tabulated results compared with those of reduction with a highly electrophilic mixed hydride containing 1:4 LiAlH4AlCl2. Examination of the products by vapor phase chromatography and infrared spectroscopy showed that the ratio of III to II was increased by reduction with LiAlH4-AlCl3 but that aliphatic and alicyclic ketoxime gave predominantly the primary amine. I gave predominantly the secondary amine but only those with unsubstituted rings or with rings substituted with electron donating groups gave almost exclusively III. The tabulated results called into question the validity of the interpretation of the formation of amines of type III by intervention of the Beckmann rearrangement of the oxime. The reduction of the alkylhydroxylamines (IV) Ph2CHNHOH and PhCH2NHOH, corresponding to the parent oximes, Ph2C:NOH and PhCH:NOH was investigated to ascertain the possibility of IV as an intermediate. Although IV was not isolated the presence of such an intermediate was detected and its formation in the above reduction was postulated.

=> d his

(FILE 'HOME' ENTERED AT 09:26:18 ON 15 JUN 2006)

FILE 'CAPLUS' ENTERED AT 09:27:34 ON 15 JUN 2006
L1 8892 ALUMINUM HYDRIDE

FILE 'REGISTRY' ENTERED AT 09:33:38 ON 15 JUN 2006
E SILANE, ((6,6-DIMETHYLBICYCLO(3.1.1)HEPT-2-EN-2-YL)OXY)(1,1-D
L2 1 E4
L3 1 E5
L4 1 E6
E NOPINONE/CN
L5 1 E3

FILE 'CAPLUS' ENTERED AT 09:36:51 ON 15 JUN 2006
L6 9 L2 OR L3 OR L4
L7 261 L5
L8 3 L6 AND L7
L9 609 DISSOLVING METAL
L10 8892 ALUMINUM HYDRIDE
L11 48361 OXIME
L12 1 L9 AND L10
L13 0 L11 AND L12
L14 4 L9(L)L11
L15 82 L10(L)L11

=> l4 and l15
7 L4
L16 0 L4 AND L15

=> l7 and l15
L17 0 L7 AND L15

=> terpene
20247 TERPENE
30083 TERPENES
L18 37682 TERPENE
(TERPENE OR TERPENES)

=> l15 and l18
L19 0 L15 AND L18

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=> logoff hold
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                        42.58      76.14

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)              SINCE FILE      TOTAL
                                                           ENTRY    SESSION
CA SUBSCRIBER PRICE                                        -3.75      -3.75

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LOGINID:SSSPTA1623PAZ

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 10:27:25 ON 15 JUN 2006
FILE 'CAPLUS' ENTERED AT 10:27:25 ON 15 JUN 2006
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COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                        42.58      76.14

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)              SINCE FILE      TOTAL
                                                           ENTRY    SESSION
CA SUBSCRIBER PRICE                                        -3.75      -3.75

=> d his

     (FILE 'HOME' ENTERED AT 09:26:18 ON 15 JUN 2006)

     FILE 'CAPLUS' ENTERED AT 09:27:34 ON 15 JUN 2006
L1          8892 ALUMINUM HYDRIDE

     FILE 'REGISTRY' ENTERED AT 09:33:38 ON 15 JUN 2006
                E SILANE, ((6,6-DIMETHYLBICYCLO(3.1.1)HEPT-2-EN-2-YL)OXY)(1,1-D
L2              1 E4
L3              1 E5
L4              1 E6
                E NOPINONE/CN
L5              1 E3

     FILE 'CAPLUS' ENTERED AT 09:36:51 ON 15 JUN 2006
L6              9 L2 OR L3 OR L4
L7            261 L5
L8              3 L6 AND L7
L9            609 DISSOLVING METAL
L10          8892 ALUMINUM HYDRIDE
L11         48361 OXIME
L12             1 L9 AND L10
L13             0 L11 AND L12
L14             4 L9(L)L11
L15            82 L10(L)L11
L16             0 L4 AND L15
```

```
L17           0 L7 AND L15
L18       37682 TERPENE
L19           0 L15 AND L18

=> aluminum chloride
        926666 ALUMINUM
           297 ALUMINUMS
        926727 ALUMINUM
                  (ALUMINUM OR ALUMINUMS)
       1079502 CHLORIDE
        157380 CHLORIDES
       1151596 CHLORIDE
                  (CHLORIDE OR CHLORIDES)
L20      28249 ALUMINUM CHLORIDE
                  (ALUMINUM(W)CHLORIDE)

=> l15 and l20
L21           2 L15 AND L20

=> d l21 1-2 ti

L21  ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Synthesis of primary allenic amines

L21  ANSWER 2 OF 2  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Lithium aluminum hydride-aluminum
     chloride reduction of oximes


=> logoff hold
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                      48.52      82.08

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                      -3.75      -3.75

 SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 10:29:02 ON 15 JUN 2006

Connecting via Winsock to STN



Welcome to STN International!  Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 10:31:20 ON 15 JUN 2006
FILE 'CAPLUS' ENTERED AT 10:31:20 ON 15 JUN 2006
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COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                      48.52      82.08

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                      -3.75      -3.75
```

=> file reg
COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION
FULL ESTIMATED COST | 48.52 | 82.08

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION
CA SUBSCRIBER PRICE | -3.75 | -3.75

FILE 'REGISTRY' ENTERED AT 10:31:30 ON 15 JUN 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 14 JUN 2006 HIGHEST RN 887828-19-5
DICTIONARY FILE UPDATES: 14 JUN 2006 HIGHEST RN 887828-19-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

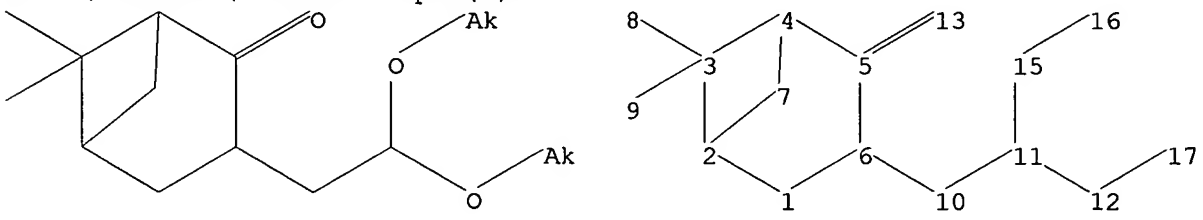
```
**********************************************************************
*                                                                    *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005.  A new display format, IDERL, is now    *
* available and contains the CA role and document type information. *
*                                                                    *
**********************************************************************
```

Structure search iteration limits have been increased. See HELP SLIMITS
for details.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=>
Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files\10784930\10784930 cmpd (X).str



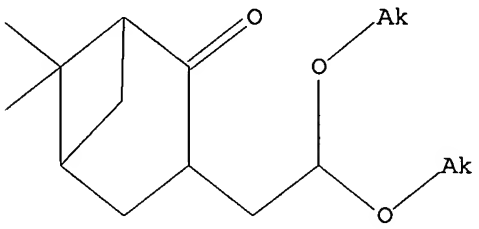
chain nodes :
8 9 10 11 12 13 15 16 17
ring nodes :
1 2 3 4 5 6 7

chain bonds :
3-8 3-9 5-13 6-10 10-11 11-12 11-15 12-17 15-16
ring bonds :
1-2 1-6 2-3 2-7 3-4 4-5 4-7 5-6
exact/norm bonds :
1-2 1-6 2-3 2-7 3-4 4-5 4-7 5-6 5-13 11-12 11-15 12-17 15-16
exact bonds :
3-8 3-9 6-10 10-11

Hydrogen count :
1:>= minimum 2 5:>= minimum 1 6:>= minimum 1 10:>= minimum 2 11:>= minimum 1
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 15:CLASS 16:CLASS 17:CLASS

L22 STRUCTURE UPLOADED

=> d l22
L22 HAS NO ANSWERS
L22 STR



Structure attributes must be viewed using STN Express query preparation.

=> search l22 sss sam
SAMPLE SEARCH INITIATED 10:31:57 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 100 TO ITERATE

100.0% PROCESSED 100 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1401 TO 2599
PROJECTED ANSWERS: 0 TO 0

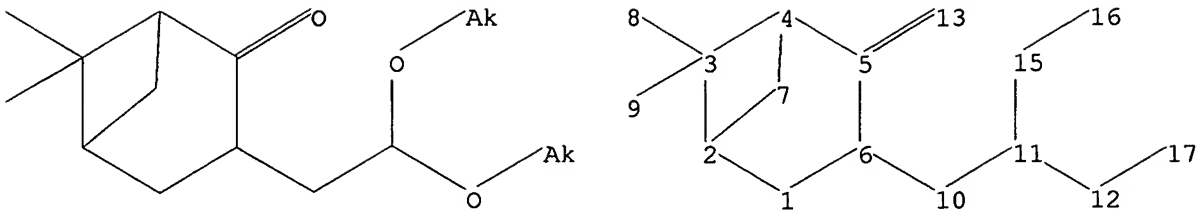
L23 0 SEA SSS SAM L22

=> search l22 sss full
FULL SEARCH INITIATED 10:32:05 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2160 TO ITERATE

100.0% PROCESSED 2160 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

L24 0 SEA SSS FUL L22

=>
Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files\10784930\10784930 corrected cmpd (X).str

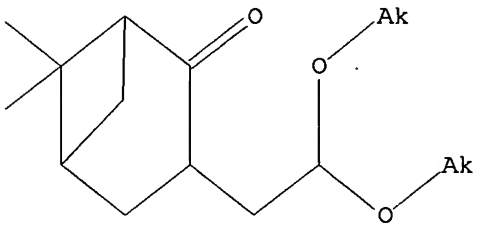


chain nodes :
8 9 10 11 12 13 15 16 17
ring nodes :
1 2 3 4 5 6 7
chain bonds :
3-8 3-9 5-13 6-10 10-11 11-12 11-15 12-17 15-16
ring bonds :
1-2 1-6 2-3 2-7 3-4 4-5 4-7 5-6
exact/norm bonds :
1-2 1-6 2-3 2-7 3-4 4-5 4-7 5-6 5-13 11-12 11-15 12-17 15-16
exact bonds :
3-8 3-9 6-10 10-11

Hydrogen count :
1:>= minimum 2 6:>= minimum 1 10:>= minimum 2 11:>= minimum 1
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 15:CLASS 16:CLASS 17:CLASS

L25 STRUCTURE UPLOADED

=> d l25
L25 HAS NO ANSWERS
L25 STR



Structure attributes must be viewed using STN Express query preparation.

=> search l25 sss sam
SAMPLE SEARCH INITIATED 10:36:36 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 100 TO ITERATE

100.0% PROCESSED 100 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1401 TO 2599
PROJECTED ANSWERS: 0 TO 0

L26 0 SEA SSS SAM L25

=> search l25 sss full
FULL SEARCH INITIATED 10:36:55 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2160 TO ITERATE

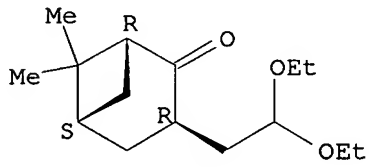
100.0% PROCESSED 2160 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

L27 1 SEA SSS FUL L25

=> d scan

L27 1 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Bicyclo[3.1.1]heptan-2-one, 3-(2,2-diethoxyethyl)-6,6-dimethyl-, (1R,3R,5S)- (9CI)
MF C15 H26 O3

Absolute stereochemistry. Rotation (+).



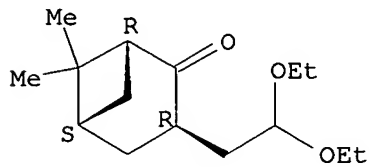
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> d l27

L27 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
RN 318981-18-9 REGISTRY
ED Entered STN: 01 Feb 2001
CN Bicyclo[3.1.1]heptan-2-one, 3-(2,2-diethoxyethyl)-6,6-dimethyl-, (1R,3R,5S)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C15 H26 O3
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	339.30	421.38

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-3.75

FILE 'CAPLUS' ENTERED AT 10:37:12 ON 15 JUN 2006
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FILE COVERS 1907 - 15 Jun 2006 VOL 144 ISS 25
FILE LAST UPDATED: 14 Jun 2006 (20060614/ED)

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=> l27
L28 1 L27

=> d l28 ti fbib abns
'ABNS' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

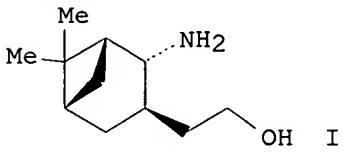
ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
CLASS ------- IPC, NCL, ECLA, FTERM
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
SCAN must be entered on the same line as the DISPLAY,

```
              e.g., D SCAN or DISPLAY SCAN)
STD ---------- BIB, CLASS

IABS --------- ABS, indented with text labels
IALL --------- ALL, indented with text labels
IBIB --------- BIB, indented with text labels
IMAX --------- MAX, indented with text labels
ISTD --------- STD, indented with text labels

OBIB --------- AN, plus Bibliographic Data (original)
OIBIB -------- OBIB, indented with text labels

SBIB --------- BIB, no citations
SIBIB -------- IBIB, no citations

HIT ---------- Fields containing hit terms
HITIND ------- IC, ICA, ICI, NCL, CC and index field (ST and IT)
               containing hit terms
HITRN -------- HIT RN and its text modification
HITSTR ------- HIT RN, its text modification, its CA index name, and
               its structure diagram
HITSEQ ------- HIT RN, its text modification, its CA index name, its
               structure diagram, plus NTE and SEQ fields
FHITSTR ------ First HIT RN, its text modification, its CA index name, and
               its structure diagram
FHITSEQ ------ First HIT RN, its text modification, its CA index name, its
               structure diagram, plus NTE and SEQ fields
KWIC --------- Hit term plus 20 words on either side
OCC ---------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field
codes.  For a list of the display field codes, enter HELP DFIELDS at
an arrow prompt (=>).  Examples of formats include: TI; TI,AU; BIB,ST;
TI,IND; TI,SO.  You may specify the format fields in any order and the
information will be displayed in the same order as the format
specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR,
FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC
to view a specified Accession Number.
ENTER DISPLAY FORMAT (BIB):end

=> d l28 ti fbib abs

L28  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2006 ACS on STN
TI   Process for producing bicyclic amino alcohol from (+)-nopinone
AN   2001:31442  CAPLUS
DN   134:101033
TI   Process for producing bicyclic amino alcohol from (+)-nopinone
IN   Honma, Tsunetoshi; Hiramatsu, Yoshiharu; Mitsumori, Susumu
PA   Shionogi & Co., Ltd., Japan
SO   PCT Int. Appl., 50 pp.
     CODEN: PIXXD2
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ---------------     ----   --------    --------------------    --------
PI   WO 2001002334        A1    20010111    WO 2000-JP4171          20000626
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU,
             LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,
```

SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

				JP 1999-188674	A 19990702
EP 1193243		A1	20020403	EP 2000-939160	20000626
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
				JP 1999-188674	A 19990702
				WO 2000-JP4171	W 20000626
JP 3730170		B2	20051221	JP 2001-507777	20000626
				JP 1999-188674	A 19990702
				WO 2000-JP4171	W 20000626
US 6723857		B1	20040420	US 2002-19670	20020102
				JP 1999-188674	A 19990702
				WO 2000-JP4171	W 20000626
US 2004171882		A1	20040902	US 2004-784930	20040225
				JP 1999-188674	A 19990702
				WO 2000-JP4171	W 20000626
				US 2002-19670	A3 20020102

OS CASREACT 134:101033; MARPAT 134:101033
GI



I

AB The bicyclic amino alc. I is prepared by reaction of (+)-nopinone with XCH2CO2R1 (X = halo; R1 = alkyl) in the presence of an additive and a base, followed by conversion of the product into an oxime, and reduction of the oxime. I is then converted in several steps to a known PGD2 antagonist.

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	3.20	424.58

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.75	-4.50

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 10:37:53 ON 15 JUN 2006

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 10:59:33 ON 15 JUN 2006
FILE 'CAPLUS' ENTERED AT 10:59:33 ON 15 JUN 2006
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	3.20	424.58

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.75	-4.50

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	3.20	424.58

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.75	-4.50

FILE 'CAPLUS' ENTERED AT 10:59:48 ON 15 JUN 2006
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FILE COVERS 1907 - 15 Jun 2006 VOL 144 ISS 25
FILE LAST UPDATED: 14 Jun 2006 (20060614/ED)

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=> dmpu
L29 285 DMPU

=> alkylation
96014 ALKYLATION
2535 ALKYLATIONS
L30 96558 ALKYLATION
(ALKYLATION OR ALKYLATIONS)

=> l29(l)l30
L31 31 L29(L)L30

=> d l31 12-31 ti

L31 ANSWER 12 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI Enantioselective construction of vicinal stereogenic quaternary centers by

dialkylation: practical total syntheses of (+)- and meso-chimonanthine

L31 ANSWER 13 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI Acylation and alkylation of 2- and 4-methylbenzonitrile

L31 ANSWER 14 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI Effect of Addends on Aggregation and Reactivity of the Lithium Enolate of p-Phenylisobutyrophenone

L31 ANSWER 15 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI C-Alkylation of peptides containing aminomalonate and (amino)(cyano)acetate residues

L31 ANSWER 16 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI Process for alkylation and Smiles rearrangement of hydroxy aromatics

L31 ANSWER 17 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI Regio- and diastereoselective dialkylation of (4S)-2,4-dimethyl-2,4-dihydro-1H-pyrazino[2,1-b]quinazoline-3,6-dione

L31 ANSWER 18 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI Selective monoalkylation of diethyl malonate, ethyl cyanoacetate, and malononitrile using a masking group for the second acidic hydrogen

L31 ANSWER 19 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI Synthesis of cycloalkadiynes of various ring size

L31 ANSWER 20 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI Synthesis and structure of functionalized cyclododecadiynes and -dienes

L31 ANSWER 21 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI Preparation of cyclic sulfamides used for the synthesis of HIV protease inhibitors via cyclization of protected linear diamino diols with SO2 precursors followed by alkylation

L31 ANSWER 22 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI A new synthesis of (±)-phoracantholide, (±)-dihydrorecifeiolide, and (±)-muscone via α-nitro ketones

L31 ANSWER 23 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI The synthesis of deuterated 4-2H-α-farnesene and 1-2H-α-farnesene

L31 ANSWER 24 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI Enantioselective synthesis of 2-alkyl substituted cysteines

L31 ANSWER 25 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI C-alkylation of sarcosine residues in cyclic tetrapeptides via lithium enolates

L31 ANSWER 26 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI C-Alkylation of peptides through polylithiated and lithium chloride solvated derivatives containing sarcosine lithium enolate units

L31 ANSWER 27 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI Replacement of carcinogenic solvent HMPA by DMI in insect sex pheromone synthesis

L31 ANSWER 28 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI trans-Disubstituted cyclohexadienes via sequential addition of a carbon nucleophile and an electrophile to (η6-benzene)tricarbonylchromium: scope of carbon electrophiles

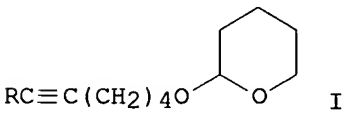
L31 ANSWER 29 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI Mono- and dialkylation of derivatives of (1R,2S)-2-hydroxycyclopentanecarboxylic acid and -cyclohexanecarboxylic acid via bicyclic dioxanones: selective generation of three contiguous stereogenic centers on a cyclohexane ring

L31 ANSWER 30 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI 1,3-Dimethyl-2-oxohexahydropyrimidine (DMPU): an alternative to HMPT in moth sex pheromone synthesis

L31 ANSWER 31 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI Stereoselective alkylation at C(α) of serine, glyceric acid, threonine, and tartaric acid involving heterocyclic enolates with exocyclic double bonds

=> d l31 30 ti fbib abs

L31 ANSWER 30 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
TI 1,3-Dimethyl-2-oxohexahydropyrimidine (DMPU): an alternative to HMPT in moth sex pheromone synthesis
AN 1988:549114 CAPLUS
DN 109:149114
TI 1,3-Dimethyl-2-oxohexahydropyrimidine (DMPU): an alternative to HMPT in moth sex pheromone synthesis
AU Bengtsson, Marie; Liljefors, Tommy
CS Dep. Org. Chem., Univ. Lund, Lund, S-221 00, Swed.
SO Synthesis (1988), (3), 250-2
CODEN: SYNTBF; ISSN: 0039-7881
DT Journal
LA English
OS CASREACT 109:149114
GI



I

AB **DMPU** proved to be a good substitute for the carcinogenic HMPA as a cosolvent in the **alkylation** of lithioalkynes. Thus, treatment of alkyne I (R = H) with BuLi in THF, followed by Me(CH2)nI (n = 0, 1) in **DMPU** gave 91-93% I [R = (CH2)nMe) which on treatment with AcCl-AcOH gave Me(CH2)nC.tplbond.C(CH2)4OAc quant.

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	18.30	442.88

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.75	-5.25

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 11:06:20 ON 15 JUN 2006

Connecting via Winsock to STN

```
Welcome to STN International!  Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
d hilogoff hold\]\
Connection closed by remote host
<------User Break------>

Connecting via Winsock to STN

SESSION RESUMED IN FILE 'CAPLUS' AT 11:33:09 ON 15 JUN 2006
FILE 'CAPLUS' ENTERED AT 11:33:09 ON 15 JUN 2006
COPYRIGHT (C) 2006 AMERICA


Welcome to STN International!  Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 11:35:34 ON 15 JUN 2006
FILE 'CAPLUS' ENTERED AT 11:35:34 ON 15 JUN 2006
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                      19.22     443.80

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                      -0.75      -5.25

=> d his

     (FILE 'HOME' ENTERED AT 09:26:18 ON 15 JUN 2006)

     FILE 'CAPLUS' ENTERED AT 09:27:34 ON 15 JUN 2006
L1          8892 ALUMINUM HYDRIDE

     FILE 'REGISTRY' ENTERED AT 09:33:38 ON 15 JUN 2006
                E SILANE, ((6,6-DIMETHYLBICYCLO(3.1.1)HEPT-2-EN-2-YL)OXY)(1,1-D
L2              1 E4
L3              1 E5
L4              1 E6
                E NOPINONE/CN
L5              1 E3

     FILE 'CAPLUS' ENTERED AT 09:36:51 ON 15 JUN 2006
L6              9 L2 OR L3 OR L4
L7            261 L5
L8              3 L6 AND L7
L9            609 DISSOLVING METAL
L10          8892 ALUMINUM HYDRIDE
L11         48361 OXIME
L12             1 L9 AND L10
L13             0 L11 AND L12
L14             4 L9(L)L11
```

```
L15          8? L10(L)L11
L16           0 L4 AND L15
L17           0 L7 AND L15
L18       37682 TERPENE
L19           0 L15 AND L18
L20       28249 ALUMINUM CHLORIDE
L21           2 L15 AND L20

     FILE 'REGISTRY' ENTERED AT 10:31:30 ON 15 JUN 2006
L22             STRUCTURE UPLOADED
L23           0 SEARCH L22 SSS SAM
L24           0 SEARCH L22 SSS FULL
L25             STRUCTURE UPLOADED
L26           0 SEARCH L25 SSS SAM
L27           1 SEARCH L25 SSS FULL

     FILE 'CAPLUS' ENTERED AT 10:37:12 ON 15 JUN 2006
L28           1 L27

     FILE 'CAPLUS' ENTERED AT 10:59:48 ON 15 JUN 2006
L29         285 DMPU
L30       96558 ALKYLATION
L31          31 L29(L)L30

=> file reg
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                               19.22     443.80

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)    SINCE FILE      TOTAL
                                                   ENTRY    SESSION
CA SUBSCRIBER PRICE                               -0.75      -5.25

FILE 'REGISTRY' ENTERED AT 11:35:51 ON 15 JUN 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   14 JUN 2006  HIGHEST RN 887828-19-5
DICTIONARY FILE UPDATES:  14 JUN 2006  HIGHEST RN 887828-19-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

*********************************************************************
*                                                                   *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005.  A new display format, IDERL, is now    *
* available and contains the CA role and document type information. *
*                                                                   *
*********************************************************************

Structure search iteration limits have been increased.  See HELP SLIMITS
for details.
```

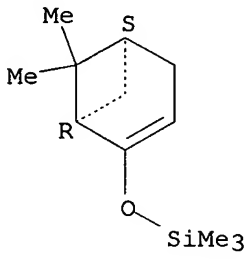
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> d l4

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
RN 72453-33-9 REGISTRY
ED Entered STN: 16 Nov 1984
CN Silane, [[(1R,5S)-6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl]oxy]trimethyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **Silane, [(6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl)oxy]trimethyl-, (1R)-**
FS STEREOSEARCH
MF C12 H22 O Si
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (+).



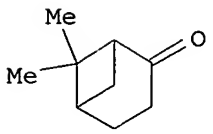
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1907 TO DATE)
7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d l5

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
RN 24903-95-5 REGISTRY
ED Entered STN: 16 Nov 1984
CN Bicyclo[3.1.1]heptan-2-one, 6,6-dimethyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2-Norpinanone, 6,6-dimethyl- (6CI, 7CI, 8CI)
OTHER NAMES:
CN β-Pinone
CN 6,6-Dimethylbicyclo[3.1.1]heptan-2-one
CN **Nopinone**
CN NSC 135004
FS 3D CONCORD
DR 473-60-9, 30469-48-8
MF C9 H14 O
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, IFICDB, IFIPAT, IFIUDB, NAPRALERT, SPECINFO, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

257 REFERENCES IN FILE CA (1907 TO DATE)
261 REFERENCES IN FILE CAPLUS (1907 TO DATE)
10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

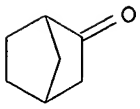
```
=> e norcamphor/cn
E1            1     NORCAMPHIDIN/CN
E2            1     NORCAMPHIDINE/CN
E3            1 --> NORCAMPHOR/CN
E4            1     NORCAMPHOR DIETHYL KETAL/CN
E5            1     NORCAMPHOR DIMETHYL KETAL/CN
E6            1     NORCAMPHOR ETHYLENE KETAL/CN
E7            1     NORCAMPHOR HYDRAZONE/CN
E8            1     NORCAMPHOR, 1,1'-(DITHIODIMETHYLENE)BIS(3,3-DIMETHYL-/CN
E9            1     NORCAMPHOR, 1,3,3,5,5-PENTAMETHYL-, OXIME/CN
E10           1     NORCAMPHOR, 1,3,4,7,7-PENTAMETHYL-/CN
E11           1     NORCAMPHOR, 1,3-DIMETHYL-/CN
E12           1     NORCAMPHOR, 1,4,5,5-TETRAMETHYL-/CN

=> e3
L32           1 NORCAMPHOR/CN

=> d l32

L32  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2006 ACS on STN
RN   497-38-1  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Bicyclo[2.2.1]heptan-2-one (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   2-Norbornanone (6CI, 8CI)
OTHER NAMES:
CN   (±)-2-Norbornanone
CN   (±)-Norcamphor
CN   2,5-Methanocyclohexanone
CN   2-Oxonorbornane
CN   dl-Norcamphor
CN   Norcamphor
CN   NSC 66537
CN   NSC 92359
CN   Racemic norcamphor
FS   3D CONCORD
DR   22270-13-9
MF   C7 H10 O
CI   COM
LC   STN Files:   AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS,
       CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, DETHERM*, GMELIN*,
       IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, RTECS*, SPECINFO, TOXCENTER,
       USPAT2, USPATFULL
         (*File contains numerically searchable property data)
```

Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1038 REFERENCES IN FILE CA (1907 TO DATE)
23 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1040 REFERENCES IN FILE CAPLUS (1907 TO DATE)
27 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	11.34	455.14

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-5.25

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 11:37:03 ON 15 JUN 2006